

May 25, 2005

4563.01

Humboldt County Department of Health and Human Services
Division of Environmental Health
100 H Street, Suite 100
Eureka, California 95501

Attention: Mr. Mark Verhey, C.E.G.

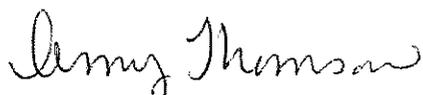
Subject: Groundwater Monitoring Report; Second Quarter 2005
Former Fortuna Shell; 819 Main Street, Fortuna, California
LOP No. 12672

Dear Mr. Verhey:

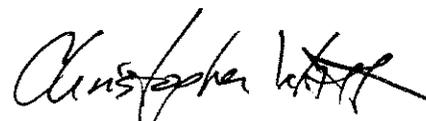
LACO ASSOCIATES (LACO) presents the results of groundwater monitoring for the second quarter of 2005, at the Humboldt Petroleum, Incorporated (HPI) former Fortuna Shell (presently Gas-4-Less) located in Fortuna, California (Figure 1). A site map and a sparge well location map are included and presented as Figures 2 and 3, respectively.

Please call or e-mail if you have any questions or concerns.

Sincerely,
LACO ASSOCIATES



Amy Thomson
Staff Geologist



Christopher J. Watt
PG 7586, Exp. 03/31/06

cc: Jim Seiler, Humboldt Petroleum

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GROUNDWATER MONITORING REPORT SECOND QUARTER 2005

Former Fortuna Shell; 819 Main Street, Fortuna, California

LOP No. 12672; LACO Project No. 4563.01

Introduction

Field activities were conducted on May 3, 2005, in accordance with generally accepted practices in this or similar locations. Details of the current groundwater monitoring sampling event are presented in Table A, below. A location map and site plan are included as Figures 1 and 2. Field sampling forms are included as Attachment 1.

Site Chronology

1999: Tanks were removed from the site. The contaminated cavity fill and excavated soil was stockpiled temporarily on-site.

2001: Monitoring wells MW 1 through MW13 were installed on site.

2002: Groundwater sampling was performed and the site characterized. Sparge wells were recommended.

2004: Two sparge wells were installed and a pilot test conducted.

TABLE A SAMPLING EVENT: March 8, 2005						
MONITORING WELL ID	SCREENED INTERVAL (feet)	DTW (feet)	PURGE METHOD	WATER QUALITY PARAMETERS	ANALYTICALS	SAMPLING SCHEDULE
					ORGANICS	
MW1	6-10	5.05	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA	Quarterly
MW2	5-10	4.75	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA	Quarterly
MW3	5-12	5.67	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA	Quarterly
MW4	5-10	4.61	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA	Quarterly
MW5	5-10	4.19	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA	Quarterly
MW6	12-20	5.33	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA	Quarterly
MW7	10-15	4.67	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA	Quarterly

TABLE A SAMPLING EVENT: March 8, 2005 Cont'd						
MONITORING WELL ID	SCREENED INTERVAL (feet)	DTW (feet)	PURGE METHOD	WATER QUALITY PARAMETERS	ANALYTICALS	SAMPLING SCHEDULE
MW8	15-20	10.34	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA	Quarterly
MW9	12-15	8.06	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA	Quarterly
MW10	12.5-15.5	9.4	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA	Quarterly
MW11	12.5-15.6	9.45	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA	Quarterly
MW12	12.5-15	9.11	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA	Quarterly
MW13	12.5-16	8.26	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA	Quarterly
MW14	5-10	5.34	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA	Quarterly
MW15	5-10	4.96	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA	Quarterly
MW16	5-11	4.55	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA	Quarterly
MW17S	22.5-24.5	21.83	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA	Quarterly
MW17D	26-28	25	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA	Quarterly

Hydraulic Gradient

Equipotential maps for the perched and shallow aquifers were generated using the May 3, 2005, hydraulic head elevations, and are presented as Figures 4 and 5, respectively. The hydraulic gradient in the perched aquifer was calculated using the three-point method in the area defined by monitoring wells MW1, MW3, and MW14. These monitoring wells were selected because they are located along the site perimeter and thus represent the hydraulic gradient over the site. The hydraulic gradient for the perched wells for this sampling event was estimated at 3.25 percent in a N35°W direction (Figure 4). The hydraulic gradient in the shallow aquifer was calculated using the three-point method in the area defined by monitoring wells MW7, MW11, and MW13. The hydraulic gradient for the shallow wells for this sampling event was 4.94 percent in the S79°W direction (Figure 5). The calculated gradient for the shallow and perched aquifers is consistent with previous measuring events (Table 1). Current and historic hydraulic head elevations are

presented in Table 2.

Laboratory Analytical Results

Groundwater analytical data from the current sampling event for the intermediate, perched, and shallow aquifers are included in Tables B, C, and D below, respectively. Copies of the current laboratory results are included as Attachment 2. Current and historic groundwater analytical data are presented in Table 2.

Table B: Intermediate Aquifer Analytical Results for the May 3, 2005, Sampling Event.

Well	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Other Analytes (µg/L)
MW17S	320	ND<50	ND<190	ND<0.50	ND<0.50	ND<0.50	ND<0.50	MTBE=300 DIPE=1.8 ETBE=1.7 TAME=2.1 All Others=ND
MW17D	130	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	MTBE=100 DIPE=2.0 All Others=ND

Table C: Perched Aquifer Analytical Results for the May 3, 2005, Sampling Event.

Well	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Other Analytes (µg/L)
MW1	3,900	370	ND<170	4.4	3.7	18	6.78	ND<1.0-10
MW2	11,000	990	ND<170	30	5.7	33	26.3	TAME=1.1
MW3	1,600	280	ND<170	1.1	ND<0.50	ND<0.50	1.29	MTBE=23 TAME=2.0 All Others=ND
MW4	300	ND<50	ND<170	1.3	ND<0.50	ND<0.50	.55	MTBE=1.8 ND<1.0-10 MTBE=210 TBA=75
MW5	21,000	3,900	2,000	640	18	180	112.5	TAME=6.9 ETBE=1.2 All Others=ND
MW14	1,000	140	ND<170	1.3	.55	1.3	.59	MTBE=7.9 TAME=1.2
MW15	2,200	170	ND<170	75	2.4	15	5.74	TAME=1.9
MW16	7,900	370	ND<170	580	15	35	40	MTBE=470 TBA=300 TAME=14 ETBE=4.3 All Others=ND

Table D: Shallow Aquifer Analytical Results for the May 3, 2005, Sampling Event.

Well	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Other Analytes (µg/L)
MW6	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	MTBE=6.8 All Others=ND
MW7	150	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	MTBE=140 TAME=7.3 All Others=ND
MW8	1,900	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	MTBE=3,300 TBA=890 ETBE=12 DIPE=2.2 1,2-DCA=1.8 All Others=ND
MW9	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	MTBE=4.1 All Others=ND
MW10	ND<50	ND<50	210	ND<0.50	ND<0.50	ND<0.50	ND<0.50	MTBE=9.1 All Others=ND
MW11	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	MTBE=3.0 All Others=ND
MW12	640	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	MTBE=720 TAME=34 ETBE=3.2 DIPE=1.6 All Others=ND
MW13	63	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	MTBE=63 TAME=1.7 All Others=ND

Future Work

- Monitoring and reporting will continue as scheduled; the next sampling event is scheduled for August 2005.
- A proposal for the Pay-For-Performance program was recently submitted to the Underground Storage Tank Cleanup Fund.
- Due to low concentrations of methyl tertiary butyl ether reported at monitoring wells MW9, MW10, and MW11, LACO has changed to a bi-annual (February-August) sampling regime.

List of Figures, Tables, and Attachments

- Figure 1: Location Map
- Figure 2: Site Map
- Figure 3: Sparge Well Location
- Figure 4: Hydrologic Gradient Map (Perched Wells) for May 3, 2005
- Figure 5: Hydrologic Gradient Map (Shallow Wells) for May 3, 2005

- Table A: Sampling Event History
- Table B: Intermediate Aquifer Analytical Results (MW17S, MW17D) for May 3, 2005

Table C: Perched Aquifer Analytical Results (MW1, MW2, MW3, MW4, MW5, MW14, MW15, MW16) for May 3, 2005

Table D: Shallow Aquifer Analytical Results (MW6, MW7, MW8, MW9, MW10, MW11, MW12, MW13) for May 3, 2005

Table 1: Historic Hydraulic Gradients

Table 2: Quarterly Groundwater Analytical Results

Attachment 1: Field Sampling Forms

Attachment 2: Current Laboratory Analytical Results

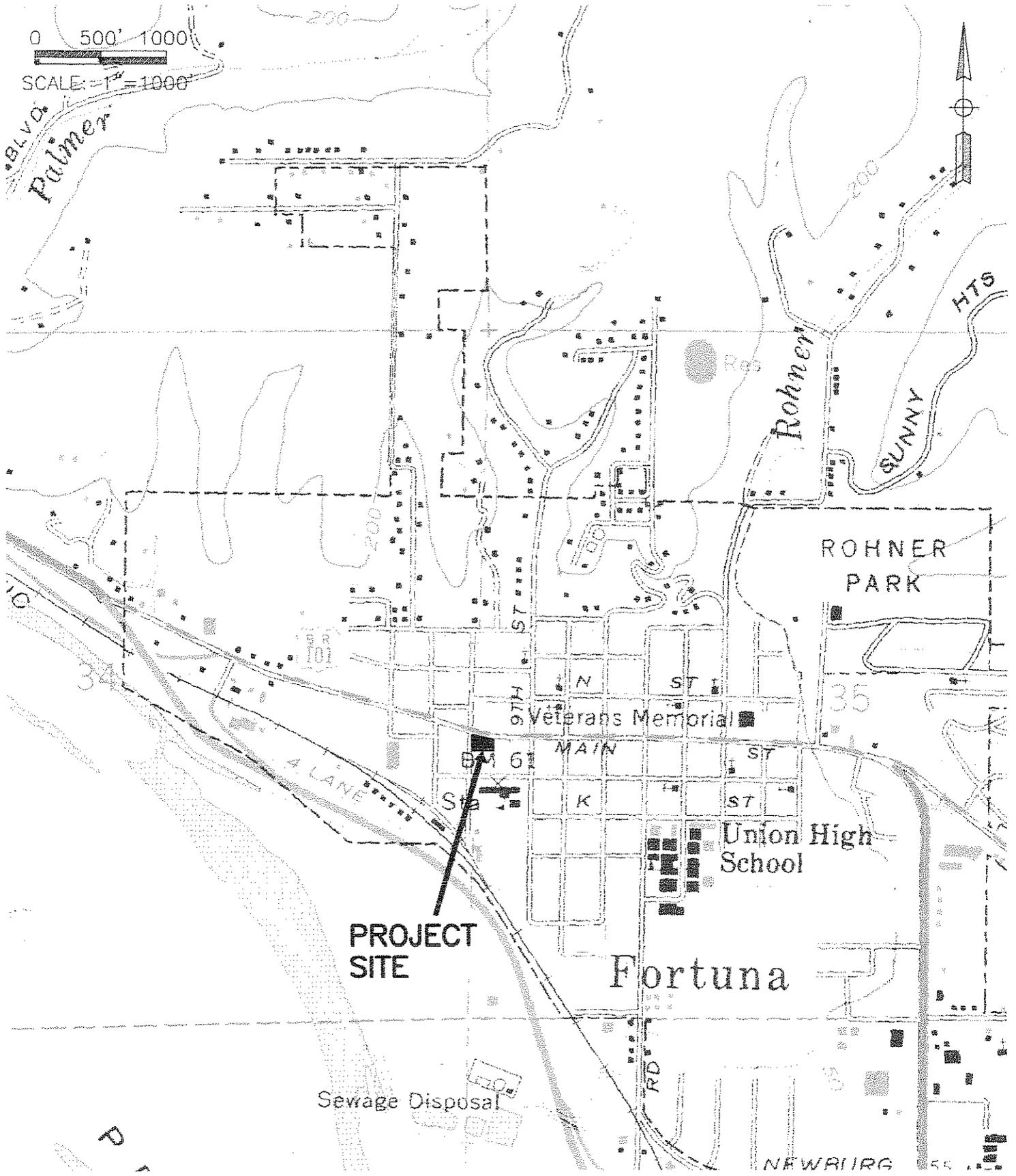


LACO ASSOCIATES
CONSULTING ENGINEERS
21 W 4TH ST. EUREKA, CA 95501 (707)443-5054

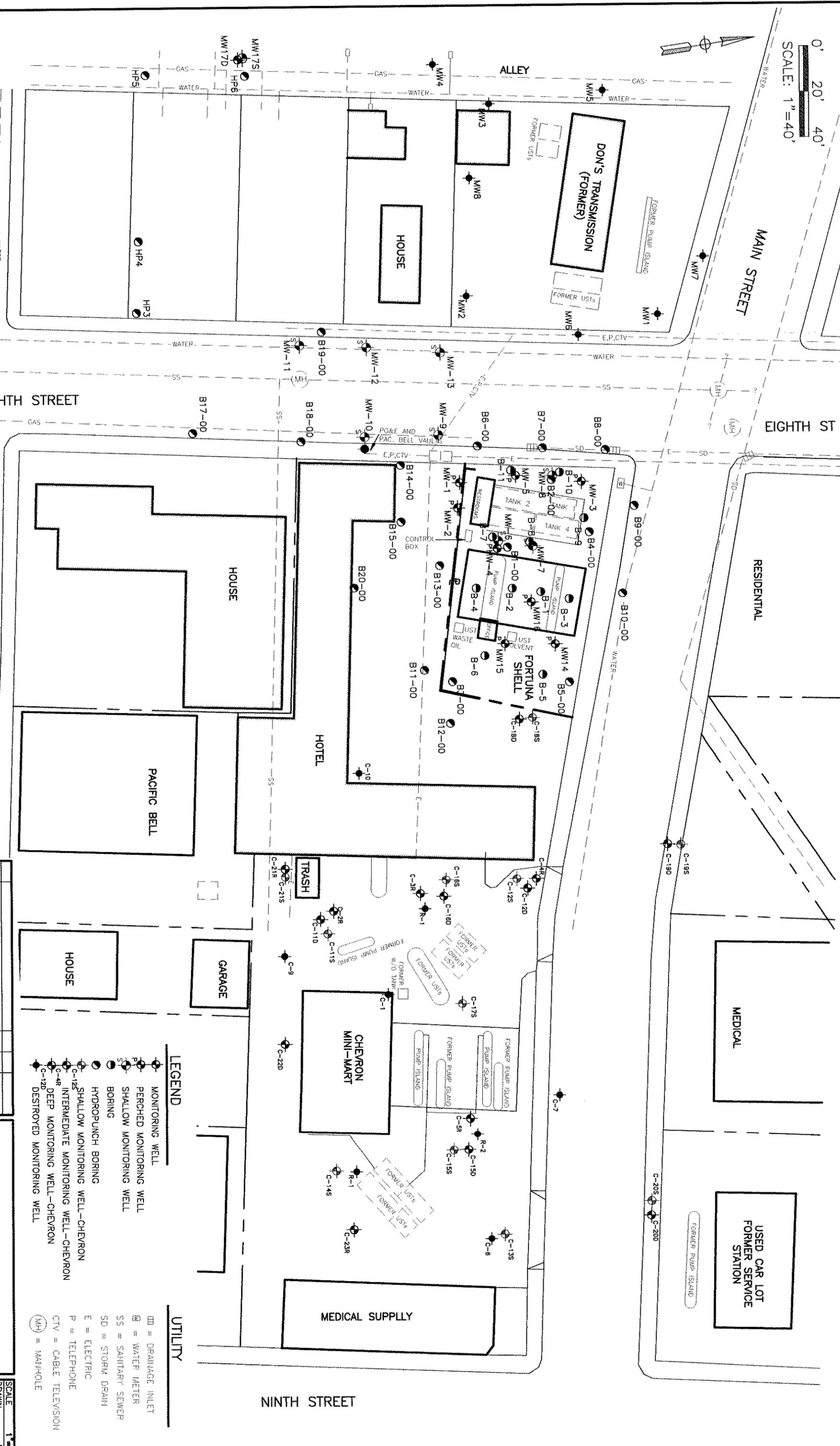
PROJECT	GROUNDWATER MONITORING REPORT
CLIENT	HUMBOLDT PETROLEUM INC
LOCATION	FORTUNA SHELL LOCATION MAP

BY	BAB
DATE	5/17/05
CHECK	
SCALE	1"=1000'

FIGURE	1
JOB NO.	4563.01



0' 20' 40'
SCALE: 1"=40'



May 17, 2005 - 1:55pm
T:\CADFILES\4500\4563 HPI Fortuna Shell\dwg\4563-GMR-20-myrd5\4563-Bsekap-mcrd5.dwg

NO.	REVISION	BY	CHK	DATE

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CONSULTING ENGINEERS
21 W. 4TH ST. EUREKA, CA 95501 (707)443-5054

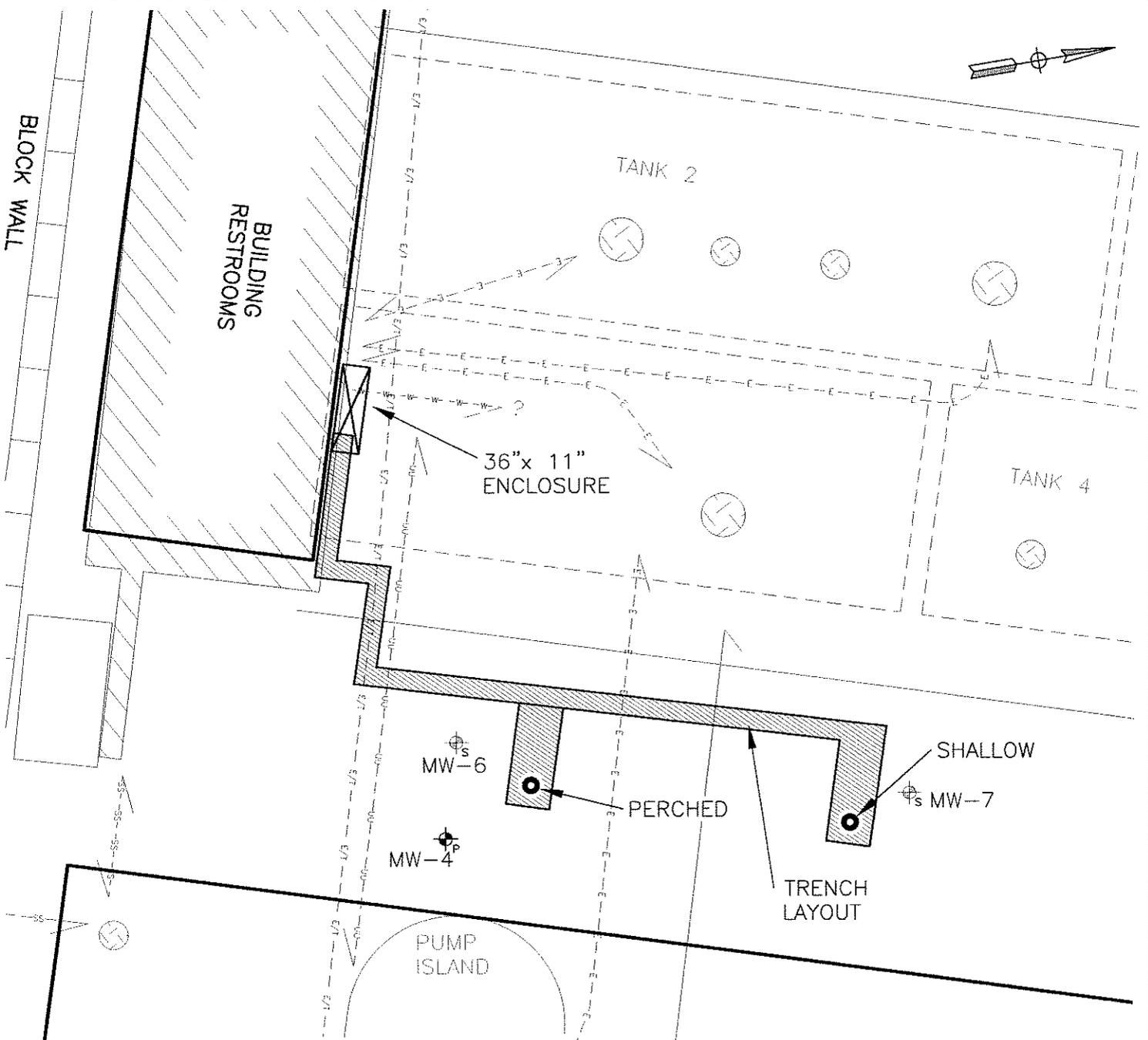
GROUNDWATER MONITORING REPORT	
SITE MAP	SCALE 1"=40'
HUMBOLDT PETROLEUM INC	DATE 5/17/05
FORTUNA SHELL	JOB NO. 4563.01
819 MAIN STREET, FORTUNA	FIGURE 2

- LEGEND**
- = MONITORING WELL
 - = PERCHED MONITORING WELL
 - = SHALLOW MONITORING WELL
 - = BORING
 - = HYDROPUNCH BORING
 - = SHALLOW MONITORING WELL-CHEVRON
 - = INTERMEDIATE MONITORING WELL-CHEVRON
 - = DEEP MONITORING WELL-CHEVRON
 - = DESTROYED MONITORING WELL
- UTILITY**
- ▭ = DRAINAGE INLET
 - ▭ = WATER METER
 - ▭ = SANITARY SEWER
 - ▭ = STORM DRAIN
 - ▭ = ELECTRIC
 - ▭ = TELEPHONE
 - ▭ = CABLE TELEVISION
 - ▭ = MANHOLE

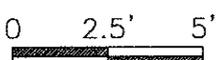


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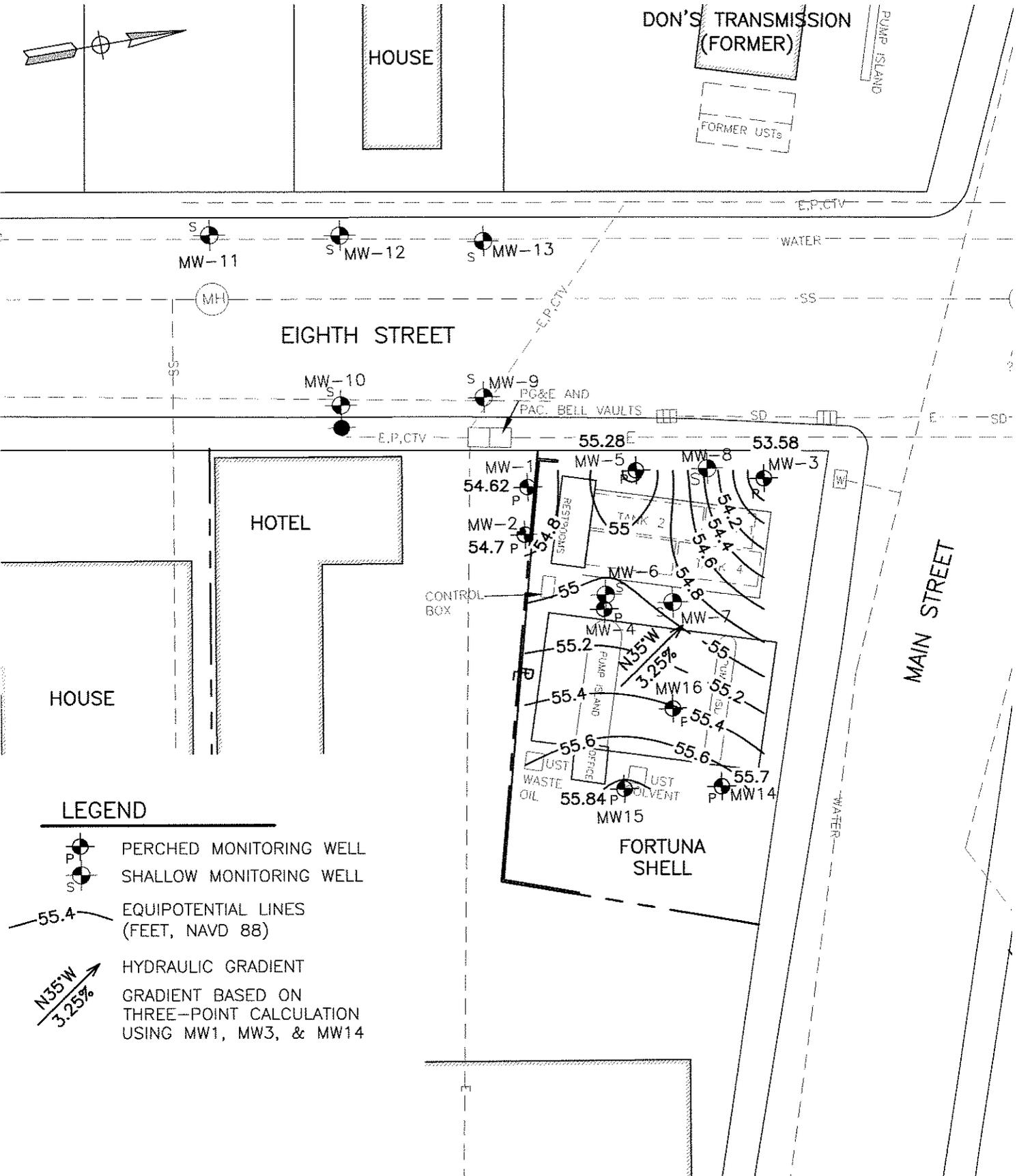
PROJECT	GROUNDWATER MONITORING REPORT	BY	RJM	FIGURE	3
CLIENT	HUMBOLDT PETROLEUM INC.	DATE	5/17/05		
LOCATION	FORTUNA SHELL	CHECK		JOB NO.	4563.01
	SPARGE WELL LOCATION	SCALE	1" = 5'		



LEGEND	
	PERCHED MONITORING WELL
	SHALLOW MONITORING WELL
	SPARGE WELL LOCATION
	ELECTRIC (NORCAL GEO. CONSULTANTS INC.)
	ELECTRIC/WATER (NORCAL GEO. CONSULTANTS INC.)
	STORM DRAIN (NORCAL GEO. CONSULTANTS INC.)
	SANITARY SEWER (NORCAL GEO. CONSULTANTS INC.)



SCALE: 1"=5'



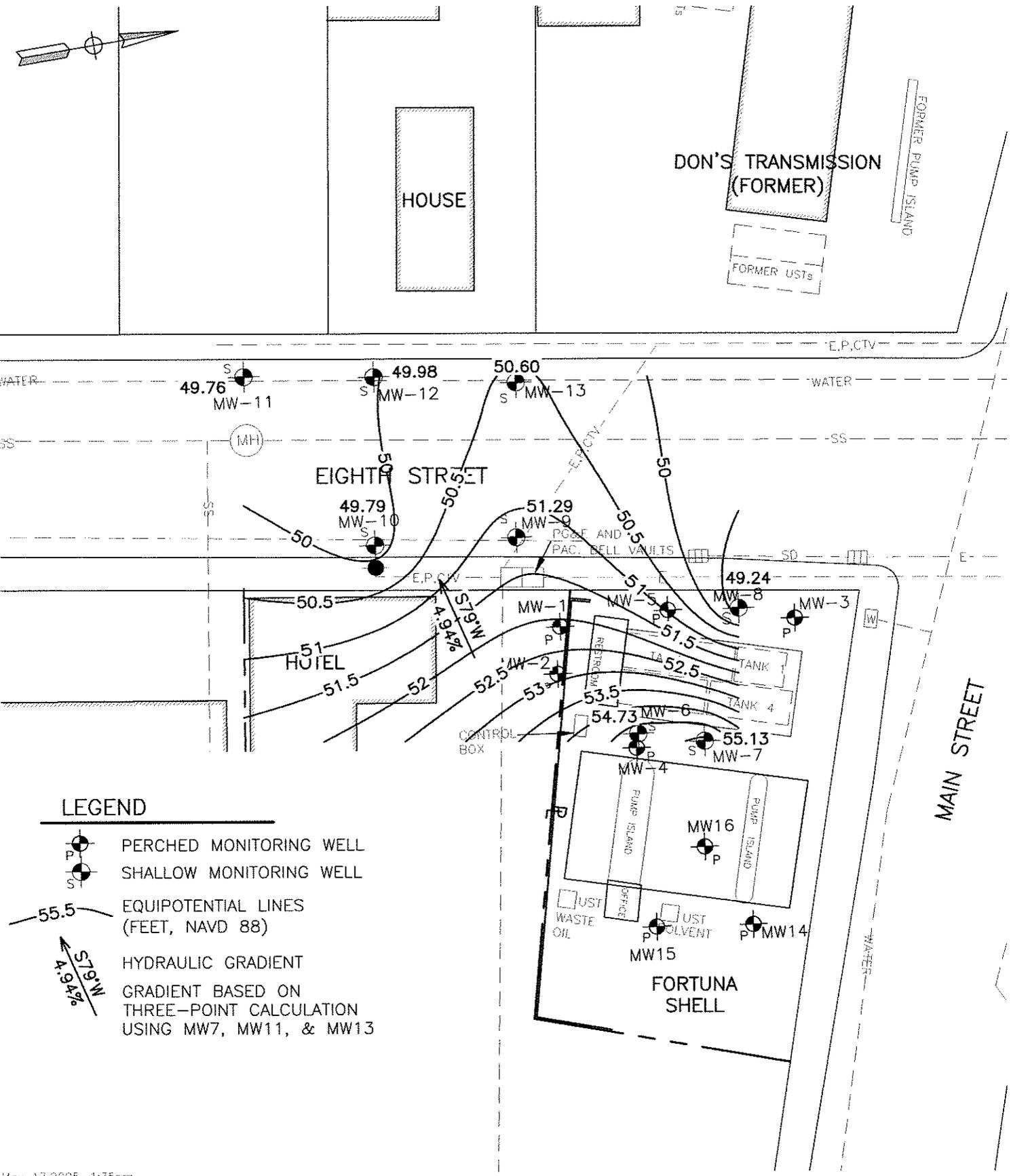
LEGEND

- PERCHED MONITORING WELL
- SHALLOW MONITORING WELL
- 55.4
EQUIPOTENTIAL LINES
(FEET, NAVD 88)
- N35°W
3.25%
HYDRAULIC GRADIENT
GRADIENT BASED ON
THREE-POINT CALCULATION
USING MW1, MW3, & MW14



LACO ASSOCIATES
CONSULTING ENGINEERS
21 W 4TH ST. EUREKA, CA 95501 (707)443-5054

PROJECT	GROUNDWATER MONITORING REPORT	BY	RJM	FIGURE	5
CLIENT	HUMBOLDT PETROLEUM, INC.	DATE	5/17/05		
LOCATION	FORTUNA SHELL, 819 MAIN ST.	CHECK		JOB NO.	
HYDRAULIC GRADIENT, SHALLOW WELLS (5/03/05)			SCALE	1"=30'	4563.01



LEGEND

- PERCHED MONITORING WELL
- SHALLOW MONITORING WELL
- EQUIPOTENTIAL LINES
(FEET, NAVD 88)
- HYDRAULIC GRADIENT
GRADIENT BASED ON
THREE-POINT CALCULATION
USING MW7, MW11, & MW13

TABLE 1: HISTORIC HYDRAULIC GRADIENTS

Fortuna Shell, 819 Main St. Fortuna, California

LOP No. 12672; LACO Project No. 4563.01

Date	Shallow Aquifer		Perched Aquifer	
	Gradient Direction	Gradient Slope (%)	Gradient Direction	Gradient Slope (%)
9/2000	S2°E	0.15	S48°W	1.1
10/2000	S2°E	0.13	S45°E	1.12
11/2000	S22°E	0.04	S34°W	1.5
12/12/2000	S56°W	6.1	---	---
1/8/2000	S64°W	10.7	---	---
3/12/2001	S37°W	14.0	---	---
6/2001	S43°W	14.3	S31°W	2.9
7/2001	S43°W	13.3	S34°W	2.0
8/2001	S71°E	24.3	S27°W	1.4
9/2001	S54°W	16.38	S29°W	1.2
10/2001	S54°W	16.28	S37°W	1.2
11/2001	S54°W	14.96	S32°W	0.8
2/5/2002	N35°W	7.4	N19°E	2.2
5/9/2002	S49°W	14.35	S62°W	1.9
8/15/2002	S30°W	5.5	S24°W	11.7
12/20/2002	S56°W	7.4	S22°W	1.8
2/11/2003	S47°W	7.0	N8°E	2.4
5/13/2003	---	---	N19°E	2.1
8/14/2003	S13°W	4.5	S1°W	2.3
11/4/2003	S24°W	22.7	S3°E	2.3
2/2/2004	S37°W	2.2	N13°E	2.7
5/4/2004	S26°W	2.8	N62°W	2.3
8/3/2004	N65°W	2.4	N79°W	2.2
11/10/2004	N88°W	4.0	N81°W	0.5
2/1/2005	S86°W	4.5	N47°W	2.0
5/3/2005	S79°W	4.9	N35°W	3.2

TABLE 2: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS

Fortuna Shell, 819 Miami St, Fortuna, California
 LOP No. 12672; LACO Project No. 4563.01

MW#	59.96										59.47												
	Screened Interval = 5-10 feet bgs										Screened Interval = 5-10 feet bgs												
8/4/2000	53.73	6.23	ND<170	900	32	69	159	620	45	ND<1.0	ND<1.0	8/4/2000	53.10	6.37	ND<170	3,600	61	590	1,556	4,500	ND<25	ND<25	
8/7/2000	53.67	6.29	ND<170	11,000	530	530	11,000	530	620	45	ND<1.0	ND<1.0	8/7/2000	53.31	6.16	ND<170	23,000	1,900	1,900	1,556	4,500	ND<25	ND<25
9/8/2000	52.85	7.11	ND<170	ND<170	ND<170	ND<170	ND<170	ND<170	ND<170	ND<170	ND<1.0	ND<1.0	9/8/2000	53.02	6.45	ND<170	ND<170	ND<170	ND<170	ND<170	ND<170	ND<170	ND<170
10/12/2000	52.33	7.63	ND<170	6,400	61	80	82.5	180	ND<5.0	ND<5.0	ND<5.0	10/12/2000	52.47	7.00	930	17,000	1,200	940	2,300	ND<25	ND<25	ND<25	
11/3/2000	53.87	6.09	ND<170	6,400	61	80	82.5	180	ND<5.0	ND<5.0	ND<5.0	11/3/2000	53.59	5.88	930	17,000	1,200	940	2,300	ND<25	ND<25	ND<25	
12/12/2000	54.67	5.29	ND<170	5,400	550	47	38	140	ND<10	ND<10	ND<10	12/12/2000	54.28	5.19	ND<170	ND<170	ND<170	ND<170	ND<170	ND<170	ND<170	ND<170	
1/8/2001	54.72	5.24	ND<170	5,400	550	47	38	140	ND<10	ND<10	ND<10	1/8/2001	54.26	5.21	ND<170	17,000	890	320	2,300	ND<50	ND<50	ND<50	
2/6/2001	55.21	4.75	ND<170	5,400	550	47	38	140	ND<10	ND<10	ND<10	2/6/2001	54.45	5.02	ND<170	17,000	890	320	2,300	ND<50	ND<50	ND<50	
3/12/2001	55.44	4.52	ND<170	5,400	550	47	38	140	ND<10	ND<10	ND<10	3/12/2001	54.76	4.71	ND<200	14,000	1,300	555	1,700	ND<25	ND<25	ND<25	
4/20/2001	55.21	4.75	ND<200	6,200	920	120	76.2	210	ND<5.0	ND<5.0	ND<5.0	4/20/2001	54.56	4.91	ND<200	14,000	1,300	555	1,700	ND<25	ND<25	ND<25	
5/8/2001	54.96	5.00	ND<200	6,200	920	120	76.2	210	ND<5.0	ND<5.0	ND<5.0	5/8/2001	54.45	5.02	ND<200	14,000	1,300	555	1,700	ND<25	ND<25	ND<25	
6/8/2001	54.84	5.12	ND<200	6,200	920	120	76.2	210	ND<5.0	ND<5.0	ND<5.0	6/8/2001	54.45	5.02	ND<200	14,000	1,300	555	1,700	ND<25	ND<25	ND<25	
7/16/2001	54.04	5.92	ND<200	6,200	920	120	76.2	210	ND<5.0	ND<5.0	ND<5.0	7/16/2001	53.68	5.79	ND<200	14,000	1,300	555	1,700	ND<25	ND<25	ND<25	
8/7/2001	53.43	6.53	570	660	26	130	98.8	190	ND<10	ND<10	ND<10	8/7/2001	53.33	6.14	330	14,000	1,100	420	2,000	ND<25	ND<25	ND<25	
9/17/2001	52.96	7.00	ND<170	660	26	130	98.8	190	ND<10	ND<10	ND<10	9/17/2001	52.98	6.49	ND<170	14,000	1,100	420	2,000	ND<25	ND<25	ND<25	
10/24/2001	52.39	7.57	ND<170	660	26	130	98.8	190	ND<10	ND<10	ND<10	10/24/2001	52.48	6.99	ND<170	14,000	1,100	420	2,000	ND<25	ND<25	ND<25	
11/6/2001	52.36	7.60	ND<170	7,200	200	100	77	120	ND<10	ND<10	ND<10	11/6/2001	52.36	7.60	ND<170	7,200	200	100	77	120	ND<10	ND<10	
2/5/2002	55.56	4.40	ND<170	4,800	83	48	27	100	ND<3.0	ND<3.0	ND<3.0	2/5/2002	55.56	4.40	ND<170	4,800	83	48	27	100	ND<3.0	ND<3.0	
5/9/2002	55.47	4.49	ND<170	3,800	260	74	48.6	52	ND<3.0	ND<3.0	ND<3.0	5/9/2002	55.47	4.49	ND<170	3,800	260	74	48.6	52	ND<3.0	ND<3.0	
8/15/2002	54.07	5.89	ND<170	4,700	280	82	46.7	81	ND<5.0	ND<5.0	ND<5.0	8/15/2002	54.07	5.89	ND<170	4,700	280	82	46.7	81	ND<5.0	ND<5.0	
12/20/2002	55.80	4.16	ND<170	6,900	260	97	52	ND<150	ND<50	ND<50	12/20/2002	55.80	4.16	ND<170	6,900	260	97	52	ND<150	ND<50	ND<50		
2/11/2003	55.58	4.38	ND<170	5,700	64	57	55.9	500	28	1.1	1.2-DCA=1.3	2/11/2003	55.58	4.38	ND<170	5,700	64	57	55.9	500	28	1.1	1.2-DCA=1.3
5/13/2003	54.91	5.05	ND<170	5,500	500	85	65.7	ND<200	47	8.1	1.2-DCA=1.0	5/13/2003	54.91	5.05	ND<170	5,500	500	85	65.7	ND<200	47	8.1	1.2-DCA=1.0
8/14/2003	52.90	7.06	ND<170	7,400	440	79	47.4	120	51	5.6	1.1	8/14/2003	52.90	7.06	ND<170	7,400	440	79	47.4	120	51	5.6	1.1
11/4/2003	52.01	7.95	ND<170	10,000	700	110	71.8	ND<150	ND<20	4.4	ND<1.0	11/4/2003	52.01	7.95	ND<170	10,000	700	110	71.8	ND<150	ND<20	4.4	ND<1.0
2/2/2004	56.19	3.77	ND<170	8,400	740	85	63	ND<150	ND<60	4.6	ND<1.0	2/2/2004	56.19	3.77	ND<170	8,400	740	85	63	ND<150	ND<60	4.6	ND<1.0
5/4/2004	54.77	5.19	ND<170	3,500	120	26	27.1	ND<80	ND<50	2.0	ND<1.0	5/4/2004	54.77	5.19	ND<170	3,500	120	26	27.1	ND<80	ND<50	2.0	ND<1.0
8/5/2004	52.65	7.31	ND<170	420	ND<50	2.1	1.9	ND<1.0	ND<10	ND<1.0	ND<1.0	8/5/2004	52.65	7.31	ND<170	420	ND<50	2.1	1.9	ND<1.0	ND<10	ND<1.0	ND<1.0
11/10/2004	54.16	5.80	ND<170	190	ND<50	ND<0.50	0.95	ND<2.0	ND<10	ND<1.0	ND<1.0	11/10/2004	54.16	5.80	ND<170	190	ND<50	ND<0.50	0.95	ND<2.0	ND<10	ND<1.0	ND<1.0
2/1/2005	55.48	4.48	ND<170	170	ND<50	ND<0.50	ND<0.50	ND<4.0	ND<10	ND<1.0	ND<1.0	2/1/2005	55.48	4.48	ND<170	170	ND<50	ND<0.50	ND<0.50	ND<4.0	ND<10	ND<1.0	ND<1.0
5/3/2005	55.35	4.61	ND<170	300	ND<50	ND<0.50	0.55	1.8	ND<15	ND<1.0	ND<1.0	5/3/2005	55.35	4.61	ND<170	300	ND<50	ND<0.50	0.55	1.8	ND<15	ND<1.0	ND<1.0

TABLE 2: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS

Fortuna Shell, 819 Main St, Fortuna, California
 LOP No. 12672; LACO Project No. 4563.01

MW5 Continued		60.06 Screened Interval = 12-20 feet bgs														
11/6/2001	52.34	7.13	20,000	1,100	420	2,500	48	550	493	2,300	550	21	ND<20	ND<20	ND<20	1,2-DCA=2.7 1,2-EDB=1.0
2/5/2002	55.26	4.21	15,000	660	---	2,100	42	390	391	2,200	890	48	ND<20	ND<20	ND<20	
5/9/2002	54.76	4.71	10,000	810	210	1,400	33	260	270	790	ND<200	21	ND<20	ND<20	ND<20	
8/15/2002	53.68	5.79	13,000	1,300	960	1,200	33	210	280	910	ND<200	24	ND<20	ND<20	ND<20	
12/20/2002	55.23	4.24	40,000	6,900	13,000	1,800	51	460	380	ND<1800	ND<1000	ND<50	ND<50	ND<50	ND<50	
2/11/2003	56.06	3.41	13,000	880	1,200	1,500	34	200	239.7	710	230	25	3.5	ND<1.0	ND<1.0	
5/13/2003	54.79	4.68	13,000	1,100	1,100	1,000	33	230	230	590	ND<1000	ND<50	ND<50	ND<50	ND<50	
8/14/2003	53.09	6.38	18,000	1,500	610	1,700	44	340	240	760	ND<1000	ND<50	ND<50	ND<50	ND<50	
11/4/2003	52.25	7.22	52,000	37,000	56,000	1,500	33	340	259.4	ND<1200	ND<200	17	ND<10	ND<10	ND<10	
2/2/2004	56.17	3.30	19,000	2,200	300	1,300	29	310	208.1	680	99	16	ND<5.5	ND<1.0	ND<1.0	1,2-DCA=2.3
5/4/2004	54.59	4.88	31,000	6,500	5,100	1,500	37	210	217.4	ND<1000	82	14	2.3	ND<10	ND<10	
8/3/2004	52.92	6.55	21,000	2,900	1,100	1,600	32	220	160	530	ND<500	ND<50	ND<50	ND<50	ND<50	
11/10/2004	54.14	5.33	140,000	25,000	12,000	830	20	50	401	ND<850	59	8	2	ND<1.0	ND<1.0	
2/1/2005	54.86	4.61	23,000	6,000	3,200	910	24	130	134.1	400	34	8.1	1.4	ND<1.0	ND<1.0	
5/3/2005	55.28	4.19	21,000	3,900	2,000	640	18	180	112.5	210	75	6.9	1.2	ND<1.0	ND<1.0	
MW6																
8/4/2000	52.86	7.20	---	---	---	---	---	---	---	---	---	---	---	---	---	---
8/7/2000	52.14	7.92	1,200	140	ND<170	2.6	ND<2.5	1.1	1.9	820	---	---	5.4	3.0	---	
9/8/2000	51.64	8.42	---	---	---	---	---	---	---	---	---	---	---	---	---	
10/12/2000	50.96	9.10	---	---	---	---	---	---	---	---	---	---	---	---	---	
11/3/2000	51.51	8.55	670	ND<50	ND<170	1.6	ND<0.5	ND<0.5	0.65	900	130	10	8.8	5.0	---	1,2 DCA=8.5
12/12/2000	53.24	6.82	---	---	---	---	---	---	---	---	---	---	---	---	---	
1/8/2001	52.99	7.07	---	---	---	---	---	---	---	---	---	---	---	---	---	
2/6/2001	53.55	6.51	900	ND<50	ND<170	ND<2.5	ND<2.5	ND<2.5	ND<2.5	1,200	ND<50	35	7.8	ND<5.0	---	1,2 DCA=7.3
3/12/2001	52.75	7.31	---	---	---	---	---	---	---	---	---	---	---	---	---	
4/20/2001	55.35	4.71	---	---	---	---	---	---	---	---	---	---	---	---	---	
5/8/2001	52.49	7.57	570	51	ND<200	1.5	ND<2.5	ND<2.5	ND<2.5	860	68	37	5.0	ND<2.5	---	1,2 DCA=4.6
6/8/2001	52.34	7.72	---	---	---	---	---	---	---	---	---	---	---	---	---	
7/16/2001	52.24	7.82	---	---	---	---	---	---	---	---	---	---	---	---	---	
8/7/2001	51.91	8.15	680	ND<50	ND<170	ND<1.3	ND<1.3	ND<1.3	ND<1.3	1,100	200	38	6.4	2.6	---	1,2 DCA=4.9
9/17/2001	51.59	8.47	---	---	---	---	---	---	---	---	---	---	---	---	---	
10/24/2001	51.06	9.00	---	---	---	---	---	---	---	---	---	---	---	---	---	
11/6/2001	50.84	9.22	750	ND<50	ND<170	ND<1.0	ND<1.0	ND<1.0	ND<1.0	910	150	35	4.9	2.1	---	1,2 DCA=3.9
2/5/2002	54.17	5.89	710	ND<50	---	ND<1.0	ND<1.0	ND<1.0	ND<1.0	1,300	350	92	7.8	3.1	---	Pb Scavys=3.7
5/9/2002	53.79	6.27	630	ND<50	---	ND<1.5	ND<1.5	ND<1.5	ND<1.5	1,100	160	54	3.5	ND<3.0	---	Pb Scavys=3.5
8/15/2002	52.88	7.18	930	ND<50	ND<170	ND<1.0	ND<1.0	ND<1.0	1.7	980	160	54	5.1	2.3	---	
12/20/2002	54.47	5.59	910	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1,200	480	64	4.9	2.7	---	1,2-DCA=4.0
2/11/2003	54.39	5.67	1,100	ND<50	ND<170	0.58	ND<0.50	ND<0.50	ND<0.50	1,300	450	74	5.2	ND<4.0	---	1,2-DCA=3.6
5/13/2003	54.53	5.53	380	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	960	180	62	3.6	1.5	---	1,2-DCA=3.1
8/14/2003	51.35	8.71	720	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1,000	210	72	4.8	2.1	---	1,2-DCA=2.4
11/4/2003	49.54	10.52	670	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1,000	190	58	3.5	1.7	---	1,2-DCA=2.3
2/2/2004	53.95	6.11	1,100	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1,100	270	64	ND<8.0	2.0	---	

TABLE 2: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS

Fortuna Shell, 819 Main St, Fortuna, California
 LOP No. 12672; LACO Project No. 4563.01

MW#	59.80	Screened Interval = 10-15 feet bgs										59.80	Screened Interval = 15-20 feet bgs										59.80
MW6 Continued		52.16	7.90	450	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	480	55	29	1.8	ND<1.0							
5/4/2004		50.44	9.62	160	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	180	ND<22	6.9	ND<1.0	ND<1.0								
8/3/2004		51.64	8.42	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	30	ND<10	ND<1.0	ND<1.0	ND<1.0								
11/10/2004		54.72	5.34	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	21	ND<10	ND<1.0	ND<1.0	ND<1.0								
2/1/2005		54.73	5.33	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	7	ND<10	ND<1.0	ND<1.0	ND<1.0								
5/3/2005																							
MW7	59.80																						
		53.63	6.17																				
8/4/2000		53.60	6.20	190	ND<170	33	2.8				67.4	3,000	700	220									
8/7/2000		52.97	6.83																				
9/8/2000		52.35	7.45																				
10/12/2000		53.50	6.30	110	ND<170	2.2	ND<1.0				1.9	1,200	280	90	4.2	ND<2.5							
11/3/2000		53.78	6.02																				
12/12/2000		54.13	5.67																				
1/8/2001		54.39	5.41	170	280	5.2	ND<5.0				ND<5.0	1,800	440	160	ND<10	ND<10							
2/6/2001		54.73	5.07																				
3/12/2001		54.61	5.19																				
4/20/2001		54.39	5.41	160	ND<200	6.6	ND<5.0				ND<5.0	2,000	450	200	ND<5.0	ND<5.0							
5/8/2001		54.17	5.63																				
6/8/2001		53.70	6.10	1,400	ND<50	8.3	ND<5.0				ND<5.0	2,100	670	180	ND<10	ND<10							
8/7/2001		53.39	6.41																				
9/17/2001		52.85	6.95																				
10/24/2001		52.63	7.17	1,400	ND<50	ND<170	ND<1.5	ND<1.5	ND<1.5	ND<1.5	ND<1.5	1,800	450	150	4.6	ND<3.0							
11/6/2001		55.40	4.40	1,500	ND<50	31	ND<1.5	ND<1.5	ND<1.5	ND<1.5	ND<1.5	2,000	750	190	7.9	3.8							
2/5/2002		54.88	4.92	1,100	ND<50	51	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	1,800	280	96	ND<5.0	ND<5.0							
5/9/2002		53.06	6.74	1,500	53	ND<170	4.6	ND<1.5	ND<1.5	ND<1.5	2.6	1,500	290	110	5.3	ND<3.0							
8/15/2002		55.83	3.97	750	ND<50	ND<170	0.64	ND<0.50	ND<0.50	ND<0.50	0.57	1,200	510	78	3.4	ND<1.0							
12/20/2002		55.32	4.48	1,400	ND<50	ND<170	36	0.69	0.74	0.74	0.61	1,300	550	78	ND<8.0	ND<4.0							
2/11/2003		53.78	6.02	620	ND<50	ND<170	18	0.64	0.79	0.79	1.21	1,000	190	64	3.4	1.9							
5/13/2003		52.90	6.90	830	54	ND<170	1.4	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1,100	250	85	4.0	1.1							
8/14/2003		52.04	7.76	570	ND<50	ND<170	1.4	ND<0.50	ND<0.50	ND<0.50	ND<0.50	780	140	48	2.7	ND<1.0							
11/4/2003		55.82	3.98	1,300	50	ND<170	7.6	ND<0.50	ND<0.50	ND<0.50	0.56	1,200	240	69	4.6	ND<4.5							
2/2/2004		54.43	5.37	800	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	870	ND<50	67	2.8	ND<1.0							
5/4/2004		52.23	7.57	710	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	720	42	48	2.4	ND<1.0							
8/3/2004		53.67	6.13	ND<50	56	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	7.0	ND<10	ND<1.0	ND<1.0								
11/10/2004		55.24	4.56	140	ND<50	ND<170	0.66	ND<0.50	ND<0.50	ND<0.50	ND<0.50	130	ND<10	5.3	ND<1.0	ND<1.0							
2/1/2005		55.13	4.67	150	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	140	ND<20	7.3	ND<1.0	ND<1.0							
5/3/2005																							
MW8	59.58																						
		52.05	7.53																				
8/4/2000		50.81	8.77	4,800	98	ND<170	ND<10	ND<10	ND<10	ND<10	ND<10	11,000	2,100	36	54	1.2 DCA=42							
8/7/2000		51.17	8.41																				
9/8/2000		52.58	7.00	3,200	65	ND<170	ND<4.0	ND<4.0	ND<4.0	ND<4.0	ND<4.0	7,800	1,300	50	56	ND<10							
10/12/2000		52.82	6.76																				
11/3/2000		52.77	6.81																				
12/12/2000		53.29	6.29	5,700	ND<50	ND<170	ND<10	ND<10	ND<10	ND<10	ND<10	8,000	1,100	61	47	ND<20							
1/8/2001		53.66	5.92																				
2/6/2001																							
3/12/2001																							

TABLE 2: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS

Fortuna Shell, 819 Main St, Fortuna, California
 LOP No. 12672; LACO Project No. 4563.01

MW#	Date	Depth (ft)	Parameter	Result	Unit	Method	Notes	
MW8 Continued	4/20/2001	53.26	6.32	ND<6.3	ND<6.3	ND<6.3	ND<13	
	5/8/2001	52.85	6.73	4,600	ND<200	ND<6.3	ND<13	
	6/8/2001	52.70	6.88	7,000	ND<250	ND<6.3	ND<13	
	7/16/2001	52.58	7.00	7,600	ND<250	ND<6.3	ND<13	
	8/7/2001	51.61	7.97	4,700	ND<170	ND<13	ND<25	
	9/17/2001	50.80	8.78	ND<50	ND<170	ND<13	ND<25	
	10/24/2001	50.28	9.30	ND<50	ND<170	ND<13	ND<25	
	11/6/2001	50.68	8.90	4,800	ND<170	ND<10	ND<20	
	2/5/2002	53.62	5.96	2,600	ND<50	ND<5.0	ND<10	
	5/9/2002	53.05	6.53	2,800	ND<170	ND<5.0	ND<10	
	8/15/2002	52.25	7.33	4,400	ND<170	ND<5.0	ND<10	
	12/20/2002	53.52	6.06	3,100	ND<170	0.63	ND<10	
	2/11/2003	54.41	5.17	4,500	ND<170	ND<5.0	ND<10	
	5/13/2003	53.56	6.02	950	ND<170	ND<5.0	ND<10	
	8/14/2003	50.53	9.05	1,300	ND<170	ND<5.0	ND<10	
MW9	11/4/2003	50.70	8.88	1,500	ND<170	1.5	ND<10	
	2/2/2004	53.82	5.76	4,200	ND<170	ND<5.0	ND<10	
	5/4/2004	52.56	7.02	2,900	ND<170	ND<5.0	ND<10	
	8/3/2004	49.60	9.98	3,000	ND<170	ND<5.0	ND<10	
	11/10/2004	49.26	10.32	3,100	ND<170	ND<5.0	ND<10	
	2/1/2005	49.74	9.84	2,600	ND<170	ND<5.0	ND<10	
	5/3/2005	49.24	10.34	1,900	ND<170	ND<5.0	ND<10	
	Screened Interval = 12.5-15.5 feet bgs							
	11/6/2001	46.34	13.01	160	ND<50	ND<50	ND<50	ND<10
	2/5/2002	52.11	7.24	92	ND<50	ND<50	ND<50	ND<10
	5/9/2002	49.62	9.73	88	ND<170	ND<50	ND<50	ND<10
	8/15/2002	49.90	9.45	100	ND<50	ND<50	ND<50	ND<10
	12/20/2002	51.46	7.89	ND<50	ND<50	ND<50	ND<50	ND<10
	5/13/2003	53.66	5.69	51	ND<50	ND<50	ND<50	ND<10
	8/14/2003	52.43	6.92	ND<50	ND<170	ND<50	ND<50	ND<10
11/4/2003	49.68	9.67	ND<50	ND<170	ND<50	ND<50	ND<10	
2/2/2004	49.12	10.23	ND<50	ND<170	ND<50	ND<50	ND<10	
5/4/2004	51.06	8.29	76	ND<50	ND<170	ND<50	ND<10	
8/3/2004	49.48	9.87	65	ND<50	ND<170	ND<50	ND<10	
11/10/2004	50.28	9.07	ND<50	ND<170	ND<50	ND<50	ND<10	
2/1/2005	51.69	7.66	ND<50	ND<170	ND<50	ND<50	ND<10	
5/3/2005	51.29	8.06	ND<50	ND<170	ND<50	ND<50	ND<10	
Screened Interval = 12-15 feet bgs								
11/6/2001	48.64	10.55	61	ND<50	ND<170	ND<50	ND<10	
2/5/2002	52.12	7.07	55	ND<50	ND<170	ND<50	ND<10	
5/9/2002	51.17	8.02	ND<50	ND<170	ND<50	ND<50	ND<10	
8/15/2002	48.04	11.15	87	ND<50	ND<170	ND<50	ND<10	
12/20/2002	51.68	7.51	53	190	ND<50	ND<50	ND<10	
2/1/2003	45.71	13.48	ND<50	ND<170	ND<50	ND<50	ND<10	
5/13/2003	48.49	10.70	ND<50	ND<170	ND<50	ND<50	ND<10	
8/14/2003	47.55	11.64	ND<50	ND<170	ND<50	ND<50	ND<10	
MW10	11/6/2001	48.64	10.55	61	ND<50	ND<170	ND<50	ND<10
	2/5/2002	52.12	7.07	55	ND<50	ND<170	ND<50	ND<10
	5/9/2002	51.17	8.02	ND<50	ND<170	ND<50	ND<50	ND<10
	8/15/2002	48.04	11.15	87	ND<50	ND<170	ND<50	ND<10
	12/20/2002	51.68	7.51	53	190	ND<50	ND<50	ND<10
	2/1/2003	45.71	13.48	ND<50	ND<170	ND<50	ND<50	ND<10
	5/13/2003	48.49	10.70	ND<50	ND<170	ND<50	ND<50	ND<10
	8/14/2003	47.55	11.64	ND<50	ND<170	ND<50	ND<50	ND<10
	Screened Interval = 12-15 feet bgs							
	11/6/2001	48.64	10.55	61	ND<50	ND<170	ND<50	ND<10
	2/5/2002	52.12	7.07	55	ND<50	ND<170	ND<50	ND<10
	5/9/2002	51.17	8.02	ND<50	ND<170	ND<50	ND<50	ND<10
	8/15/2002	48.04	11.15	87	ND<50	ND<170	ND<50	ND<10
	12/20/2002	51.68	7.51	53	190	ND<50	ND<50	ND<10
	2/1/2003	45.71	13.48	ND<50	ND<170	ND<50	ND<50	ND<10
5/13/2003	48.49	10.70	ND<50	ND<170	ND<50	ND<50	ND<10	
8/14/2003	47.55	11.64	ND<50	ND<170	ND<50	ND<50	ND<10	

TABLE 2: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS

Fortuna Shell, 819 Main St, Fortuna, California
 LOP No. 12672; LACO Project No. 4563.01

MW10 - Continued	59.21	Screened Interval = 12.5-15.5 feet bgs														
11/4/2003	46.54	12.65	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	45	ND<20	2.3	ND<1.0	ND<1.0	
2/2/2004	48.11	11.08	86	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	52	ND<20	2.5	ND<1.0	ND<1.0	
5/4/2004	47.69	11.50	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	15	ND<10	ND<1.0	ND<1.0	ND<1.0	
8/3/2004	46.27	12.92	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	17	ND<10	ND<1.0	ND<1.0	ND<1.0	
11/10/2004	46.58	12.61	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	28	ND<10	1.4	ND<1.0	ND<1.0	
2/1/2005	50.36	8.83	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	11	ND<10	ND<1.0	ND<1.0	ND<1.0	
5/3/2005	49.79	9.40	ND<50	ND<50	210	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	9	ND<10	ND<1.0	ND<1.0	ND<1.0	
MW11	59.21	Screened Interval = 12.5-15.5 feet bgs														
11/6/2001	47.85	11.36	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	10	ND<50	ND<1.0	ND<1.0	ND<1.0	
2/5/2002	50.97	8.24	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	6.3	ND<50	ND<1.0	ND<1.0	ND<1.0	
5/9/2002	50.45	8.76	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.1	ND<50	ND<1.0	ND<1.0	ND<1.0	
8/15/2002	48.00	11.21	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.2	ND<50	ND<1.0	ND<1.0	ND<1.0	
12/20/2002	51.92	7.29	ND<50	ND<50	240	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.4	ND<20	ND<1.0	ND<1.0	ND<1.0	
2/11/2003	50.79	8.42	ND<50	ND<50	230	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.8	ND<20	ND<1.0	ND<1.0	ND<1.0	
5/13/2003	51.24	7.97	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.1	ND<20	ND<1.0	ND<1.0	ND<1.0	
8/14/2003	48.11	11.10	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.1	ND<20	ND<1.0	ND<1.0	ND<1.0	
11/4/2003	45.99	13.22	ND<50	ND<50	270	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	9.2	ND<20	ND<1.0	ND<1.0	ND<1.0	
2/2/2004	51.18	8.03	52	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	18	ND<10	ND<1.0	ND<1.0	ND<1.0	
5/4/2004	50.04	9.17	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.7	ND<10	ND<1.0	ND<1.0	ND<1.0	
8/3/2004	47.41	11.80	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.8	ND<10	ND<1.0	ND<1.0	ND<1.0	
11/10/2004	49.59	9.62	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.7	ND<10	ND<1.0	ND<1.0	ND<1.0	
2/1/2005	50.38	8.83	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.7	ND<10	ND<1.0	ND<1.0	ND<1.0	
5/3/2005	49.76	9.45	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.0	ND<10	ND<1.0	ND<1.0	ND<1.0	
MW12	59.09	Screened Interval = 12.5-15 feet bgs														
11/6/2001	48.05	11.04	1,700	ND<50	ND<170	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	2,400	250	51	11	ND<1.0	
2/5/2002	Well was inaccessible															
5/9/2002	50.67	8.42	1,300	ND<50	ND<170	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	2,900	110	75	6.3	ND<5.0	
8/15/2002	48.97	10.12	1,800	ND<50	ND<170	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	2,300	96	92	9.4	ND<5.0	
12/20/2002	52.42	6.67	1,800	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2,600	430	94	9.0	3.3	
2/11/2003	Well was inaccessible															
5/13/2003	51.41	7.68	470	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1,400	94	72	5.0	1.7	
8/14/2003	48.71	10.38	740	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1,600	76	82	6.6	2.3	
11/4/2003	48.20	10.89	840	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1,600	ND<50	68	4.7	1.9	
2/2/2004	51.69	7.40	1,500	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1,700	ND<60	72	5.6	2.3	
5/4/2004	50.28	8.81	1,200	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1,400	ND<45	69	4.5	1.8	
8/3/2004	48.34	10.75	2,100	76	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1,300	110	96	9.5	2.7	
11/10/2004	49.78	9.31	1,200	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1,200	45	47	3.4	1.6	
2/1/2005	50.58	8.51	990	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	950	56	40	3.4	1.5	
5/3/2005	49.98	9.11	640	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	720	ND<1.5	34	3.2	1.6	
MW13	58.86	Screened Interval = 12.5-15 feet bgs														
11/6/2001	48.82	10.04	2,000	ND<50	ND<170	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	2,800	330	110	9.8	ND<5.0	
2/5/2002	51.58	7.28	1,300	ND<50	ND<170	ND<1.5	ND<1.5	ND<1.5	ND<1.5	ND<1.5	2,800	370	160	11.0	4.0	
5/9/2002	Well was inaccessible															
8/15/2002	51.01	7.85	1,000	ND<50	ND<170	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	1,200	51	70	5.7	ND<2.0	
12/20/2002	53.68	5.18	ND<50	54	570	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	38	ND<20	1.8	ND<1.0	ND<1.0	
2/11/2003	Well was inaccessible															
5/13/2003	52.06	6.80	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	21	ND<20	1.9	ND<1.0	ND<1.0	
8/14/2003	49.48	9.38	160	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	260	ND<20	13	ND<1.0	ND<1.0	
11/4/2003	49.12	9.74	170	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	210	ND<20	13	ND<1.0	ND<1.0	
2/2/2004	52.09	6.77	330	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	360	ND<20	13	ND<2.5	ND<1.0	
5/4/2004	50.89	7.97	270	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	280	ND<10	12	ND<2.5	ND<1.0	

TABLE 2: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS

Fortuna Shell, 819 Main St, Fortuna, California
 LOP No. 12672, LACO Project No. 4563.01

MW13 Continued														
	49.13	9.73	960	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	820	34	2.2	1.3
8/3/2004	50.52	8.34	400	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	370	ND<25	16	ND<1.0
11/10/2004	51.10	7.76	270	ND<50	270	ND<0.50	ND<0.50	ND<0.50	ND<0.50	260	ND<40	9.5	ND<1.0	ND<1.0
2/1/2005	50.60	8.26	63	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	63	ND<10	1.7	ND<1.0	ND<1.0
5/3/2005														
MW14														
	61.04	Screened Interval = 5-10 feet bgs												
11/10/2004	53.89	7.15	1,100	150	ND<170	0.62	ND<0.50	1.2	ND<0.50	ND<30	ND<20	1.7	ND<1.0	ND<1.0
2/1/2005	55.76	5.28	580	120	ND<170	0.77	ND<0.50	0.65	ND<0.50	ND<15	ND<10	ND<1.0	ND<1.0	ND<1.0
5/3/2005	55.70	5.34	1,000	140	ND<170	1.3	0.55	1.3	0.59	7.9	ND<10	1.2	ND<1.0	ND<1.0
MW15														
	60.80	Screened Interval = 5-10 feet bgs												
11/10/2004	54.37	6.43	1,600	90	ND<170	97	2.7	15	6.3	70	ND<40	2.6	ND<1.0	ND<1.0
2/1/2005	56.34	4.46	1,100	120	ND<170	40	1.4	8.9	3.4	ND<30	ND<10	ND<1.0	ND<1.0	ND<1.0
5/3/2005	55.84	4.96	2,200	170	ND<170	75	2.4	15	5.74	ND<70	ND<20	1.9	ND<1.0	ND<1.0
MW16														
	60.24	Screened Interval = 5-10 feet bgs												
11/10/2004	54.45	5.79	3,900	200	ND<170	480	13	22	31.9	500	61	12	5.2	ND<1.0
2/1/2005	55.75	4.49	5,600	340	ND<170	580	16	31	40.8	490	25	13	5.5	ND<1.0
5/3/2005	55.69	4.55	7,900	370	ND<170	580	15	35	33.7	470	300	14	4.3	ND<1.0
MW17S														
	56.96	Screened Interval = 22.5-24.5 feet bgs												
11/10/2004	35.70	21.26	64	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	33	ND<35	ND<1.0	ND<1.0
2/1/2005	34.71	22.25	180	70	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	180	ND<50	ND<1.0	ND<1.0	1.2
5/3/2005	35.13	21.83	320	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	300	ND<15	2.1	1.7	1.8
MW17D														
	56.95	Screened Interval = 26-28 feet bgs												
11/10/2004	32.42	24.53	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	5.0	ND<20	ND<1.0	ND<1.0	ND<1.0
2/1/2005	32.76	24.19	120	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	110	55	ND<1.0	ND<1.0	2.0
5/3/2005	31.95	25.00	130	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	100	ND<20	ND<1.0	ND<1.0	2.0
Field Duplicate														
8/7/01 (MW-5)	---	---	14,000	---	---	2,100	52	350	434	2,000				
11/6/01 (MW-5)	---	---	20,000	---	---	2,500	46	520	462	2,200	510	22		
2/5/02 (MW-2)	---	---	8,900	---	---	150	11	56	39	180	100	23		
5/9/2002 (MW-5)	---	---	10,000	---	---	11,400	33	280	250	780	21	21		
8/15/2002 (MW-10)	---	---	67	---	---	ND<0.50	ND<0.50	0.90	2.2	38		1.7		
12/20/02 (MW-11)	---	---	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.4				
2/11/03 (MW-10)	---	---	50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	47		1.5		
8/14/03 (MW4)	---	---	7,100	---	---	450	23	81	47.5	120	28	5.7	1.1	ND<1.0
11/4/03 (MW8)	---	---	1,500	---	---	1.5	ND<0.50	0.53	ND<0.50	4,600	1,200	130	20	2.8
														1.2-DCA=2.4

TABLE 2: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS

Fortuna Shell, 819 Main St, Fortuna, California
LOP No. 12672; LACO Project No. 4563.01

NOTES:

- TPHG - total petroleum hydrocarbons as gasoline
- TPHD - total petroleum hydrocarbons as diesel
- TPHno - total petroleum hydrocarbons as motor oil
- xylene = sum of m,p-xylene and o-xylene
- MTBE - methyl tertiary butyl ether
- Other Analytes include the fuel oxygenates and lead scavengers:
 - TAME - tertiary amyl methyl ether
 - TBA - tertiary butyl alcohol
 - DIPE - di-isopropyl ether
 - ETBE - ethyl tertiary butyl ether
 - Methanol, ethanol
 - 1,2-dichlorobenzene
 - 1,3-dichlorobenzene
 - 1,4-dichlorobenzene
 - 1,2-dichloroethane (1,2 DCA)
 - Ethylene dibromide (EDB)
- sample not analyzed for parameter
- ND<50 - non-detect at reporting limits shown
- Bold results indicate analyte detection**

Attachment 1



Project Name: Fortuna Shell - HPI	Tech: SJD
Project No.: 4563.01	Mob/Demob time: .50 / .50
Date: 5-3-05	Travel time: 1.0
Global ID No.: T0602300471	Time on site: 8:00
PM: CJW	Time off site: 2:45
	Mileage: 36

	MW11		MW10		MW9		MW3		MW6		
	DIAMETER (in)	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00		
SCREENED INTERVAL (ft)	12.5-15.5		12.5-15.5		12-15		5-12		12-20		
DEPTH TO WATER (ft)	9.45		9.40		8.06		5.67		5.33		
FIELD INTRINSICS	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	
	pH							6.99	6.84	6.43	6.34
	TEMP (°C)							17.4	16.8	15.8	15.8
	E _{ow} (µmhos)							408	321	220	222
	ORP (mV)							54	-83	-35	30
	DO (mg/L)							1.02	0.25	5.06	4.02
	OTHER (units)										
	PURGE	TIME						8:57	9:13	9:35	9:47
		METHOD (DHP/CB/B)						DHP		DHP	
		RATE (Lpm)						0.19		0.17	
VOLUME (L)							3.0		2.0		
COLOR							CLEAR	YELLOWISH W/SHEEN	CLOUDY	CLOUDY	
ODOR							MED. ORGANIC / LIGHT FUEL		SLIGHT SHOE STORE		
INTAKE DEPTH (FEET)							10.0		16.0		
SAMPLE	TIME						9:15		9:49		
	METHOD (DHP/CB/B)						DHP		DHP		
	ANALYTES	8260 List 5; TPHd/mo w/SGC		8260 List 5; TPHd/mo w/SGC		8260 List 5; TPHd/mo w/SGC		8260 List 5; TPHd/mo w/SGC		8260 List 5; TPHd/mo w/SGC	
	TOTAL DRAWDOWN (FEET)						0.33		2.25		
	REMARKS										
WELL CONDITION						good		good			
WASTE DRUMS											

DHP=DOWN HOLE PUMP CB=CHECK BALL B=BAILER FD=FIELD DUPLICATE MB=METHOD BLANK FF=FIELD FILTERED



Project Name: **Fortuna Shell - HPI**
Project No.: **4563.01**
Date: **5-3-05**
Golbal ID No.: **T0602300471**
PM: **CJW**

Tech: **SJD**
Mob/Demob time: **50/50**
Travel time: **1.0**
Time on site: **8:00**
Time off site: **2:45**
Mileage: **36**

WELL No.:		MW12	MW7	MW13	MW1	MW4	
DIAMETER (in)		2.00	2.00	2.00	2.00	2.00	
SCREENED INTERVAL (ft)		12.5-15	10 - 15	12.5-15	6-10	5-10	
DEPTH TO WATER (ft)		9.1	4.67	8.26	5.09	4.61	
FIELD INTRINSICS	pH		6.48	6.43		6.18	6.10
	TEMP (°C)		16.5	15.9		15.7	15.7
	Ecw (µmohs)		273	274		300	302
	ORP (mV)		39	42		66	74
	DO (mg/L)		1.34	0.70		2.78	0.82
	OTHER (units)		_____			_____	
PURGE	TIME		10:07	10:13		10:30	10:38
	METHOD (DHP/CB/B)		DHP			DHP	
	RATE (Lpm)		0.18			0.18	
	VOLUME (L)		1.10			1.40	
	COLOR		CLEAR	CLEAR		CLEAR	CLEAR
	ODOR		MED. SWEET			MED. SHOE STORE	
SAMPLE	INTAKE DEPTH (FEET)		12.5			8.0	
	TIME		10:15			10:40	
	METHOD (DHP/CB/B)		DHP			DHP	
	ANALYTES		8260 List 5; TPHd/mo w/SGC			8260 List 5; TPHd/mo w/SGC	
	TOTAL DRAWDOWN (FEET)		1.36			0.65	
REMARKS		_____			_____		
WELL CONDITION		ALL 3 BOLT HOLES STRIPPED (HAS 3/8" BOLTS)			good		
WASTE DRUMS							



Project Name: Fortuna Shell - HPI	Tech: SJD
Project No.: 4563.01	Mob/Demob time: 1.50/1.50
Date: 5-3-05	Travel time: 1.0
Global ID No.: T0602300471	Time on site: 8:00
PM: CJW	Time off site: _____
	Mileage: 36

WELL No.:	MW14		MW15		MW16		MW17S		MW17D		
DIAMETER (in)	1.50		1.50		1.50		1.50		1.50		
SCREENED INTERVAL (ft)	5-10		5-10		5-10		22.5-24.5		26-28		
DEPTH TO WATER (ft)	5.34		4.96		4.55		21.83		25.00		
FIELD INTRINSICS	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	
	pH	6.76	6.75	6.64	6.61	6.60	6.53				
	TEMP (°C)	16.5	17.2	17.0	17.5	17.4	16.2				
	Ecw (µmohs)	371	356	333	323	324	326				
	ORP (mV)	8	-36	-25	-51	-33	-70				
	DO (mg/L)	1.48	0.27	0.86	0.37	1.21	0.52				
OTHER (units)	_____		_____		_____		_____		_____		
PURGE	TIME	11:03	11:13	11:30	11:40	12:14	12:24				
	METHOD (DHP/CB/B)	DHP		DHP		DHP					
	RATE (Lpm)	0.18		0.18		0.18					
	VOLUME (L)	1.75		1.80		1.75					
	COLOR	CLEAR	CLEAR	CLEAR	CLEAR	CLOUDY	CLOUDY				
	ODOR	SLIGHT SHOE STORE/ORGANIC		LIGHT FUEL		STRONG SHOE STORE					
SAMPLE	INTAKE DEPTH (FEET)	8.0		9.0		9.0					
	TIME	11:15		11:52		12:30					
	METHOD (DHP/CB/B)	DHP		DHP		DHP					
	ANALYTES	8260 List 5; TPHd/mo w/SGC		8260 List 5; TPHd/mo w/SGC		8260 List 5; TPHd/mo w/SGC		8260 List 5; TPHd/mo w/SGC		8260 List 5; TPHd/mo w/SGC	
	TOTAL DRAWDOWN (FEET)	2.62		2.86		2.85					
	REMARKS	LOWERED DHP TO 9.0' TO COLLECT SAMPLE		LOWERED DHP TO 10.0' TO COLLECT SAMPLE		_____					
WELL CONDITION	good		good		LIMITED VOLUME IN LITRE BOTTLE		good				
WASTE DRUMS											

DHP=DOWN HOLE PUMP CB=CHECK BALL B=BAILER FD=FIELD DUPLICATE MB=METHOD BLANK FF=FIELD FILTERED



Project Name: **Fortuna Shell - HPI**
Project No.: **4563.01**
Date: **5-3-05**
Golbal ID No.: **T0602300471**
PM: **CJW**

Tech: **SJD**
Mob/Demob time: **.50/.50**
Travel time: **1.0**
Time on site: **8:00**
Time off site: **2:45**
Mileage: **36**

WELL No.:	MW2		MW8		MW5						
DIAMETER (in)	2.00		2.00		2.00						
SCREENED INTERVAL (ft)	5-10		15-20		5-10						
DEPTH TO WATER (ft)	4.75		10.34		4.19						
FIELD INTRINSICS	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	
	pH	6.78	6.62	6.51	6.42	X					
	TEMP (°C)	17.9	16.8	18.0	17.6						
	Ecw (µmohs)	286	266	269	290						
	ORP (mV)	-68	-85	-2	0						
	DO (mg/L)	1.45	0.32	1.09	0.38						
	OTHER (units)	_____		_____							
TIME	12:45	12:55	1:19	1:27	2:15			2:18			
METHOD (DHP/CB/B)	DHP		DHP		1 1/2" B						
RATE (Lpm)	0.19		0.20		1.3						
VOLUME (L)	1.90		1.60		4.0						
COLOR	CLEAR	LT. GREY TINT	CLEAR	CLEAR	CLOUDY TURBID	YELLOWISH TURBID w/ SPECKLED SHEEN					
ODOR	STRONG FUEL / RUBBER		LIGHT SWEET / SULFUR		STRONG FUEL						
INTAKE DEPTH (FEET)	9.0		17.5		_____						
TIME	12:57		1:29		2:25						
METHOD (DHP/CB/B)	DHP		DHP		1 1/2" B						
ANALYTES	8260 List 5; TPHd/mo w/SGC		8260 List 5; TPHd/mo w/SGC		8260 List 5; TPHd/mo w/SGC						
TOTAL DRAWDOWN (FEET)	0.33		2.74		_____						
REMARKS	_____		_____		T+P = NO FP						
WELL CONDITION	good		good		good						
WASTE DRUMS											

DHP=DOWN HOLE PUMP CB=CHECK BALL B=BAILER FD=FIELD DUPLICATE MB=METHOD BLANK FF=FIELD FILTERED

Project Name:

FORTUNA SHELL - HPI

Tech:

SJD

Project No.:

4563.01

Date:

5-3-05

METER ACCURACY RANGE						WELL ID: mw6					
WELL ID:	+/- 0.2 pH	+/- 0.5 °C	+/- 20 µmohs	+/- 2 mv	+/- 0.3 mg/L	TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
MW3											
	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)						
						9:37	6.38	15.8	218	-4	4.73
8:59	6.89	16.6	373	-25	0.58	9:39	6.35	15.6	219	12	4.46
9:01	6.86	16.6	376	-49	0.49	9:41	6.35	15.6	220	19	4.27
9:03	6.86	16.7	378	-61	0.44	9:43	6.35	15.7	221	25	4.15
9:05	6.86	16.7	381	-68	0.41	9:45	6.34	15.8	221	29	4.10
9:07	6.85	16.8	383	-74	0.39	9:47	6.34	15.8	222	30	4.02
9:09	6.84	17.0	326	-79	0.34						
9:11	6.84	16.9	326	-82	0.26						
9:13	6.84	16.8	321	-83	0.25						

WELL ID: mw7						WELL ID: mw4					
TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)	TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
10:09	6.44	16.2	279	42	0.77	10:32	6.14	15.6	301	69	2.01
10:11	6.43	15.9	277	42	0.71	10:34	6.11	15.7	300	72	1.00
10:13	6.43	15.9	274	42	0.70	10:36	6.11	15.7	301	73	0.90
						10:38	6.10	15.7	302	74	0.82

WELL ID: mw14						WELL ID: mw15					
TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)	TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
11:05	6.74	16.9	359	-16	0.67	11:32	6.59	17.0	335	-32	0.65
11:07	6.75	16.9	359	-29	0.44	11:34	6.58	16.9	332	-40	0.39
11:09	6.75	16.9	357	-33	0.31	11:36	6.59	17.0	328	-47	0.41
11:11	6.75	17.1	357	-35	0.29	11:38	6.60	17.3	325	-50	0.39
11:13	6.75	17.2	356	-36	0.27	11:40	6.61	17.5	323	-51	0.37

Project Name:

FORTUNA SHELL - NPI

Tech:

SJD

Project No.:

4563.01

Date:

5-3-05

WELL ID:		METER ACCURACY RANGE					WELL ID: MW2					
	+/- 0.2 pH	+/- 0.5 °C	+/- 20 µmohs	+/- 2 mV	+/- 0.3 mg/L	TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)	
12:16	6.56	16.8	333	-50	0.68	12:47	6.67	17.4	282	-69	0.53	
12:18	6.53	16.2	332	-62	0.60	12:49	6.63	16.9	274	-78	0.28	
12:20	6.53	16.1	330	-67	0.55	12:51	6.63	16.9	271	-83	0.29	
12:22	6.53	16.1	328	-69	0.54	12:53	6.62	16.9	268	-85	0.29	
12:24	6.53	16.2	326	-70	0.52	12:55	6.62	16.8	266	-85	0.32	

WELL ID: MW8						WELL ID:					
TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)	TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
1:21	6.46	17.4	276	-1	0.78	X					
1:23	6.43	17.4	283	0	0.52						
1:25	6.42	17.5	286	0	0.44						
1:27	6.42	17.6	290	0	0.38						

WELL ID:						WELL ID:					
TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)	TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
						X					



Project Name: **Fortuna Shell - HPI** Tech: **SJD JLS**
 Project No.: **4563.01** Mob/Demob time: **5/15**
 Date: **5-03-05** Travel time: **1**
 Golbal ID No.: **T0602300471** Time on site: **7:45 am**
 PM: **CJW** Time off site: **2:30 pm**
 Mileage: **36**

WELL No.:	MW11	MW10	MW9	MW3	MW6
DIAMETER (in)	2.00	2.00	2.00	2.00	2.00
SCREENED INTERVAL (ft)	12.5-15.5	12.5-15.5	12-15	5-12	12-20
DEPTH TO WATER (ft)	9.45'	9.40'	8.06'		

FIELD INTRINSICS	INITIAL		FINAL		INITIAL		FINAL		INITIAL		FINAL	
	pH	6.62	6.55	6.48	6.33	6.47	7.10					
TEMP (°C)	16.5	18.4	17.0	17.7	17.0	16.7						
E _{cw} (µmohs)	337	341	282	286	294	287						
ORP (mV)	-46	-47	26	36	19	-94						
DO (mg/L)	1.01	0.27	1.39	0.43	0.99	0.35						
OTHER (units)	-		-		-							

PURGE	TIME	11:52	12:02	10:57	11:07	10:11	10:25				
	METHOD (DHP/CB/B)	DHP		DHP		DHP					
	RATE (Lpm)	0.15		0.2		0.143					
	VOLUME (L)	1.5		2.0		2.0					
	COLOR	Clear	Clear	Clear	LT gray	Clear	Clear				
	ODOR	mild		slight		slight					
	INTAKE DEPTH (FEET)	14.00'		14.00'		13.50'					

SAMPLE	TIME	12:09	11:12	10:29			
	METHOD (DHP/CB/B)	DHP		DHP		DHP	
	ANALYTES	8260 List 5; TPHd/mo w/SGC		8260 List 5; TPHd/mo w/SGC		8260 List 5; TPHd/mo w/SGC	
	TOTAL DRAWDOWN (FEET)	2.50		3.45		3.66	
	REMARKS	-		-		-	

WELL CONDITION	Good	Good	Good		
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WASTE DRUMS



Project Name: Fortuna Shell - HPI	Tech: SJD JLS
Project No.: 4563.01	Mob/Demob time: .51.5
Date: 5-03-05	Travel time: 1
Global ID No.: T0602300471	Time on site: 7:45
PM: CJW	Time off site: 2:30
	Mileage: 36

WELL No.:	MW12	MW7	MW13	MW1	MW4				
DIAMETER (in)	2.00	2.00	2.00	2.00	2.00				
SCREENED INTERVAL (ft)	12.5-15	10 - 15	12.5-15	6-10	5-10				
DEPTH TO WATER (ft)	9.4'		8.26	5.05'					
FIELD INTRINSICS	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	
	pH	6.49	6.36			7.02	6.89	6.67	6.54
	TEMP (°C)	17.4	18.5			16.5	17.6	17.6	17.9
	Ecw (µmohs)	396	394			388	0	270	239
	ORP (mV)	0	16			-19	-15	-57	-32
	DO (mg/L)	1.23	0.33			2.12	1.24	1.58	0.42
	OTHER (units)	—		—		—		—	
	TIME	12:30	12:42			1:06	1:16	1:48	2:00
	METHOD (DHP/CB/B)	DHP				DHP		DHP	
	RATE (Lpm)	0.167				0.2		0.208	
VOLUME (L)	2.0				2.0		2.5		
COLOR	Clear	Clear			Clear	LT Brown	Clear	LT Brown	
ODOR	Sweet				Sweet		oil		
INTAKE DEPTH (FEET)	13.75				13.75'		8.00'		
SAMPLE	TIME	12:47				1:23		2:04	
	METHOD (DHP/CB/B)	DHP				DHP		DHP	
	ANALYTES	8260 List 5; TPHd/mo w/SGC		8260 List 5; TPHd/mo w/SGC		8260 List 5; TPHd/mo w/SGC		8260 List 5; TPHd/mo w/SGC	
	TOTAL DRAWDOWN (FEET)	1.40				2.36		1.31	
	REMARKS	—				—		—	
WELL CONDITION	Good				Good		Good		
WASTE DRUMS									



Project Name: **Fortuna Shell - HPI**
Project No.: **4563.01**
Date: **5-03-05**
Global ID No.: **T0602300471**
PM: **CJW**

Tech: **SJD JLS**
Mob/Demob time: **1.5/1.0**
Travel time: **1**
Time on site: **7:45 a.m.**
Time off site: **2:30 p.m.**
Mileage: **36**

WELL No.:	MW14	MW15	MW16	MW17S	MW17D					
DIAMETER (in)	1.50	1.50	1.50	1.50	1.50					
SCREENED INTERVAL (ft)	5-10	5-10	5-10	22.5-24.5	26-28					
DEPTH TO WATER (ft)				21.83	25.00					
FIELD INTRINSICS	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
	pH									
	TEMP (°C)									
	E _{cw} (µmhos)									
	ORP (mV)									
	DO (mg/L)									
OTHER (units)										
PURGE	TIME									
	METHOD (DHP/CB/B)									
	RATE (Lpm)									
	VOLUME (L)									
	COLOR									
	ODOR									
	INTAKE DEPTH (FEET)									
SAMPLE	TIME									
	METHOD (DHP/CB/B)									
	8260 List 5; TPHd/mo w/SGC		8260 List 5; TPHd/mo w/SGC		8260 List 5; TPHd/mo w/SGC		8260 List 5; TPHd/mo w/SGC		8260 List 5; TPHd/mo w/SGC	
	TOTAL DRAWDOWN (FEET)									
	REMARKS									
WELL CONDITION				Good		Good				
WASTE DRUMS										



Project Name: Fortuna Shell (HPI)

Tech: JLS

Project No.: 4563.01

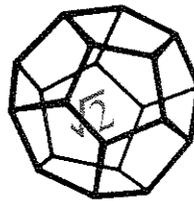
Date: 5-3-05

WELL ID:	METER ACCURACY RANGE					WELL ID:						
MW#9	+/- 0.2 pH	+/- 0.5 °C	+/- 20 µmohs	+/- 2 mv	+/- 0.3 mg/L	MW#10	TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
	TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)						
	10:13	6.95	17.7	288	-59	0.96	10:59	6.33	17.4	282	31	0.68
	10:15	6.98	17.4	287	-65	0.53	11:01	6.33	17.5	282	33	0.39
	10:17	7.01	17.0	287	-76	0.33	11:03	6.33	17.5	282	35	0.38
	10:19	7.02	16.8	287	-81	0.31	11:05	6.33	17.6	287	35	0.41
	10:21	7.06	16.5	287	-88	0.33	11:07	6.33	17.7	286	36	0.43
	10:23	7.08	16.6	287	-92	0.35						
	10:25	7.10	16.7	287	-94	0.35						

WELL ID:	MW#11					WELL ID:	MW#12					
	TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)	TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
	11:54	6.54	17.9	337	-45	1.35	12:32	6.43	18.6	396	4	1.10
	11:56	6.54	17.8	338	-46	0.48	12:34	6.41	17.8	398	5	0.53
	11:58	6.54	18.3	338	-46	0.41	12:36	6.40	17.9	397	8	0.41
	12:00	6.55	18.4	340	-47	0.33	12:38	6.38	17.9	400	11	0.36
	12:02	6.55	18.4	341	-47	0.27	12:40	6.37	18.3	398	14	0.33
							12:42	6.36	18.5	394	16	0.33

WELL ID:	MW#13					WELL ID:	MW#1					
	TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)	TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
	1:08	6.94	16.7	4	-25	1.37	1:50	6.56	17.3	259	-43	0.55
	1:10	6.93	16.9	0	-20	1.45	1:52	6.54	17.5	259	-41	0.48
	1:12	6.92	17.0	0	-18	1.42	1:54	6.54	17.4	259	-37	0.39
	1:14	6.91	17.4	0	-16	1.25	1:56	6.54	17.6	258	-35	0.39
	1:16	6.89	17.6	0	-15	1.24	1:58	6.54	17.9	256	-33	0.42
							2:00	6.54	17.9	239	-32	0.42

Attachment 2



May 17, 2005

LACO Associates
P.O. Box 1023
Eureka, CA 95502

RECEIVED
LACO ASSOCIATES
MAY 18 2005
BY: JG

Order No.: 0505064
Invoice No.: 50174
PO No.: TASK 3023
ELAP No. 1247-Expires July 2006

Attn: Accounts Payable

RE: 4563.01, FORTUNA SHELL

DRG

CW

FRB

SAMPLE IDENTIFICATION

Fraction Client Sample Description

- 01A 4563-MW1-W
- 01D 4563-MW1-W
- 02A 4563-MW2-W
- 02D 4563-MW2-W
- 03A 4563-MW3-W
- 03D 4563-MW3-W
- 04A 4563-MW4-W
- 04D 4563-MW4-W
- 05A 4563-MW5-W
- 05D 4563-MW5-W
- 06A 4563-MW6-W
- 06D 4563-MW6-W
- 07A 4563-MW7-W
- 07D 4563-MW7-W
- 08A 4563-MW8-W
- 08D 4563-MW8-W
- 09A 4563-MW9-W
- 09D 4563-MW9-W
- 10A 4563-MW10-W
- 10D 4563-MW10-W
- 11A 4563-MW11-W
- 11D 4563-MW11-W
- 12A 4563-MW12-W
- 12D 4563-MW12-W
- 13A 4563-MW13-W
- 13D 4563-MW13-W
- 14A 4563-MW14-W
- 14D 4563-MW14-W

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

All solid results are expressed on a wet-weight basis unless otherwise noted.

REPORT CERTIFIED BY

Laboratory Supervisor(s)

QA Unit

Jesse G. Chaney, Jr.
Laboratory Director

May 17, 2005

LACO Associates
P.O. Box 1023
Eureka, CA 95502

Order No.: 0505064
Invoice No.: 50174
PO No.: TASK 3023
ELAP No. 1247-Expires July 2006

Attn: Accounts Payable

RE: 4563.01, FORTUNA SHELL

SAMPLE IDENTIFICATION

15A	4563-MW15-W
15D	4563-MW15-W
16A	4563-MW16-W
16D	4563-MW16-W
17A	4563-MW17S-W
17D	4563-MW17S-W
18A	4563-MW17D-W
18D	4563-MW17D-W
19A	4563-QCTB-W

CLIENT: LACO Associates
Project: 4563.01, FORTUNA SHELL
Lab Order: 0505064

CASE NARRATIVE

All samples submitted for a silica gel cleanup were initially analyzed for diesel/motor oil. The samples showing no detectable levels of the analytes were not subjected to the cleanup procedure.

TPH as Diesel/Motor Oil w/ Silica Gel Cleanup:

Samples 4563-MW1-W, 4563-MW2-W, 4563-MW3-W, 4563-MW5-W, 4563-MW14-W, 4563-MW15-W and 4563-MW16-W contain some material lighter than diesel. However, some of this material extends into the diesel range of molecular weights. These samples also contain material in the diesel range of molecular weights, but the material does not exhibit the peak pattern typical of diesel oil.

Samples 4563-MW5-W AND 4563-MW10-W do not have the typical pattern of fresh motor oil. However, the results reported represent the amount of material in the motor oil range.

Gasoline Components/Additives:

The gasoline value for sample 4563-MW1-W includes the reported gasoline components in addition to other peaks in the gasoline range.

The gasoline values for samples 4563-MW2-W, 4563-MW3-W, 4563-MW4-W, 4563-MW5-W, 4563-MW14-W, 4563-MW15-W and 4563-MW16-W include the reported gasoline components and additives in addition to other peaks in the gasoline range.

The gasoline values for samples 4563-MW7-W, 4563-MW8-W, 4563-MW12-W, 4563-MW13-W, 4563-MW17S-W and 4563-MW17D-W are primarily from the reported gasoline additives.

Some reporting limits were raised for samples 4563-MW2-W, 4563-MW3-W, 4563-MW4-W, 4563-MW5-W, 4563-MW7-W, 4563-MW12-W, 4563-MW15-W, 4563-MW17S-W and 4563-MW17D-W due to matrix interference.

Sample 4563-MW8-W was diluted and the reporting limits raised additionally due to matrix interference.

The surrogate recoveries for samples 4563-MW2-W and 4563-MW5-W were outside of the acceptance limits. The surrogate recoveries for the quality control samples were within the acceptance limits. This indicates that the low surrogate recoveries may be due to matrix effects from the samples.

TPH as Diesel/Motor Oil:

There was an interferent present in the method blank analyzed on 5/9/05 that was above the reporting limit for diesel. The samples were not effected by the interferent; therefore, the data were accepted.

Date: 17-May-05
WorkOrder: 0505064

ANALYTICAL REPORT

Client Sample ID: 4563-MW1-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-01A

Matrix: Groundwater

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	ND	1.0	µg/L	1.0		5/5/05
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		5/5/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		5/5/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		5/5/05
Benzene	4.4	0.50	µg/L	1.0		5/5/05
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		5/5/05
1,2-Dichloroethane	ND	1.0	µg/L	1.0		5/5/05
Toluene	3.7	0.50	µg/L	1.0		5/5/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/5/05
Chlorobenzene	ND	1.0	µg/L	1.0		5/5/05
Ethylbenzene	18	0.50	µg/L	1.0		5/5/05
m,p-Xylene	5.8	0.50	µg/L	1.0		5/5/05
o-Xylene	0.98	0.50	µg/L	1.0		5/5/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/5/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/5/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/5/05
Surrogate: 1,4-Dichlorobenzene-d4	84.9	80.8-139	% Rec	1.0		5/5/05

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	3,900	50	µg/L	1.0		5/5/05

Client Sample ID: 4563-MW1-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-01D

Matrix: Groundwater

Test Name: TPH as Diesel/Motor Oil w/ Silica Gel Cleanup

Reference: EPA 3510/3630/GCFID(LUFT)/8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	370	50	µg/L	1.0	5/11/05	5/16/05
TPHC Motor Oil	ND	170	µg/L	1.0	5/11/05	5/16/05

Date: 17-May-05
WorkOrder: 0505064

ANALYTICAL REPORT

Client Sample ID: 4563-MW2-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-02A

Matrix: Groundwater

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	ND	10	µg/L	1.0		5/6/05
Tert-butyl alcohol (TBA)	ND	15	µg/L	1.0		5/6/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		5/6/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		5/6/05
Benzene	30	0.50	µg/L	1.0		5/6/05
Tert-amyl methyl ether (TAME)	1.1	1.0	µg/L	1.0		5/6/05
1,2-Dichloroethane	ND	2.0	µg/L	1.0		5/6/05
Toluene	5.7	0.50	µg/L	1.0		5/6/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/6/05
Chlorobenzene	ND	1.0	µg/L	1.0		5/6/05
Ethylbenzene	33	0.50	µg/L	1.0		5/6/05
m,p-Xylene	25	0.50	µg/L	1.0		5/6/05
o-Xylene	1.3	0.50	µg/L	1.0		5/6/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/6/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/6/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/6/05
Surrogate: 1,4-Dichlorobenzene-d4	74.6	80.8-139	% Rec	1.0		5/6/05

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	11,000	2,500	µg/L	50		5/6/05

Client Sample ID: 4563-MW2-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-02D

Matrix: Groundwater

Test Name: TPH as Diesel/Motor Oil w/ Silica Gel Cleanup

Reference: EPA 3510/3630/GCFID(LUFT)/8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	990	50	µg/L	1.0	5/11/05	5/16/05
TPHC Motor Oil	ND	170	µg/L	1.0	5/11/05	5/16/05

Date: 17-May-05

WorkOrder: 0505064

ANALYTICAL REPORT

Client Sample ID: 4563-MW3-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-03A

Matrix: Groundwater

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	23	1.0	µg/L	1.0		5/5/05
Tert-butyl alcohol (TBA)	ND	20	µg/L	1.0		5/5/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		5/5/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		5/5/05
Benzene	1.1	0.50	µg/L	1.0		5/5/05
Tert-amyl methyl ether (TAME)	2.0	1.0	µg/L	1.0		5/5/05
1,2-Dichloroethane	ND	1.0	µg/L	1.0		5/5/05
Toluene	ND	0.50	µg/L	1.0		5/5/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/5/05
Chlorobenzene	ND	1.0	µg/L	1.0		5/5/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/5/05
m,p-Xylene	0.70	0.50	µg/L	1.0		5/5/05
o-Xylene	0.59	0.50	µg/L	1.0		5/5/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/5/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/5/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/5/05
Surrogate: 1,4-Dichlorobenzene-d4	93.0	80.8-139	% Rec	1.0		5/5/05

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	1,600	50	µg/L	1.0		5/5/05

Client Sample ID: 4563-MW3-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-03D

Matrix: Groundwater

Test Name: TPH as Diesel/Motor Oil w/ Silica Gel Cleanup

Reference: EPA 3510/3630/GCFID(LUFT)/8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	280	50	µg/L	1.0	5/11/05	5/16/05
TPHC Motor Oil	ND	170	µg/L	1.0	5/11/05	5/16/05

Date: 17-May-05
WorkOrder: 0505064

ANALYTICAL REPORT

Client Sample ID: 4563-MW4-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-04A

Matrix: Groundwater

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	1.8	1.0	µg/L	1.0		5/5/05
Tert-butyl alcohol (TBA)	ND	15	µg/L	1.0		5/5/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		5/5/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		5/5/05
Benzene	1.3	0.50	µg/L	1.0		5/5/05
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		5/5/05
1,2-Dichloroethane	ND	1.0	µg/L	1.0		5/5/05
Toluene	ND	0.50	µg/L	1.0		5/5/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/5/05
Chlorobenzene	ND	1.0	µg/L	1.0		5/5/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/5/05
m,p-Xylene	0.55	0.50	µg/L	1.0		5/5/05
o-Xylene	ND	0.50	µg/L	1.0		5/5/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/5/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/5/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/5/05
Surrogate: 1,4-Dichlorobenzene-d4	93.6	80.8-139	% Rec	1.0		5/5/05

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	300	50	µg/L	1.0		5/5/05

Client Sample ID: 4563-MW4-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-04D

Matrix: Groundwater

Test Name: TPH as Diesel/Motor Oil w/ Silica Gel Cleanup

Reference: EPA 3510/3630/GCFID(LUFT)/8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	5/11/05	5/16/05
TPHC Motor Oil	ND	170	µg/L	1.0	5/11/05	5/16/05

Date: 17-May-05

WorkOrder: 0505064

ANALYTICAL REPORT

Client Sample ID: 4563-MW5-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-05A

Matrix: Groundwater

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	210	50	µg/L	50		5/6/05
Tert-butyl alcohol (TBA)	75	10	µg/L	1.0		5/6/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		5/6/05
Ethyl tert-butyl ether (ETBE)	1.2	1.0	µg/L	1.0		5/6/05
Benzene	640	25	µg/L	50		5/6/05
Tert-amyl methyl ether (TAME)	6.9	1.0	µg/L	1.0		5/6/05
1,2-Dichloroethane	ND	3.0	µg/L	1.0		5/6/05
Toluene	18	0.50	µg/L	1.0		5/6/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/6/05
Chlorobenzene	ND	1.0	µg/L	1.0		5/6/05
Ethylbenzene	180	25	µg/L	50		5/6/05
m,p-Xylene	110	0.50	µg/L	1.0		5/6/05
o-Xylene	2.5	0.50	µg/L	1.0		5/6/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/6/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/6/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/6/05
Surrogate: 1,4-Dichlorobenzene-d4	72.9	80.8-139	% Rec	1.0		5/6/05

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	21,000	2,500	µg/L	50		5/6/05

Client Sample ID: 4563-MW5-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-05D

Matrix: Groundwater

Test Name: TPH as Diesel/Motor Oil w/ Silica Gel Cleanup

Reference: EPA 3510/3630/GCFID(LUFT)/8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	3,900	500	µg/L	10	5/11/05	5/17/05
TPHC Motor Oil	2,000	1,700	µg/L	10	5/11/05	5/17/05

Date: 17-May-05
WorkOrder: 0505064

ANALYTICAL REPORT

Client Sample ID: 4563-MW6-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-06A

Matrix: Groundwater

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	6.8	1.0	µg/L	1.0		5/5/05
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		5/5/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		5/5/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		5/5/05
Benzene	ND	0.50	µg/L	1.0		5/5/05
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		5/5/05
1,2-Dichloroethane	ND	1.0	µg/L	1.0		5/5/05
Toluene	ND	0.50	µg/L	1.0		5/5/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/5/05
Chlorobenzene	ND	1.0	µg/L	1.0		5/5/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/5/05
m,p-Xylene	ND	0.50	µg/L	1.0		5/5/05
o-Xylene	ND	0.50	µg/L	1.0		5/5/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/5/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/5/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/5/05
Surrogate: 1,4-Dichlorobenzene-d4	92.7	80.8-139	% Rec	1.0		5/5/05

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	ND	50	µg/L	1.0		5/5/05

Client Sample ID: 4563-MW6-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-06D

Matrix: Groundwater

Test Name: TPH as Diesel/Motor Oil

Reference: EPA 3510/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	5/8/05	5/9/05
TPHC Motor Oil	ND	170	µg/L	1.0	5/8/05	5/9/05

Date: 17-May-05
WorkOrder: 0505064

ANALYTICAL REPORT

Client Sample ID: 4563-MW7-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-07A

Matrix: Groundwater

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	140	50	µg/L	50		5/6/05
Tert-butyl alcohol (TBA)	ND	20	µg/L	1.0		5/6/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		5/6/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		5/6/05
Benzene	ND	0.50	µg/L	1.0		5/6/05
Tert-amyl methyl ether (TAME)	7.3	1.0	µg/L	1.0		5/6/05
1,2-Dichloroethane	ND	1.0	µg/L	1.0		5/6/05
Toluene	ND	0.50	µg/L	1.0		5/6/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/6/05
Chlorobenzene	ND	1.0	µg/L	1.0		5/6/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/6/05
m,p-Xylene	ND	0.50	µg/L	1.0		5/6/05
o-Xylene	ND	0.50	µg/L	1.0		5/6/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/6/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/6/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/6/05
Surrogate: 1,4-Dichlorobenzene-d4	94.0	80.8-139	% Rec	1.0		5/6/05

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	150	50	µg/L	1.0		5/6/05

Client Sample ID: 4563-MW7-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-07D

Matrix: Groundwater

Test Name: TPH as Diesel/Motor Oil w/ Silica Gel Cleanup

Reference: EPA 3510/3630/GCFID(LUFT)/8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	5/11/05	5/16/05
TPHC Motor Oil	ND	170	µg/L	1.0	5/11/05	5/16/05

Date: 17-May-05
WorkOrder: 0505064

ANALYTICAL REPORT

Client Sample ID: 4563-MW8-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-08A

Matrix: Groundwater

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	3,300	100	µg/L	100		5/6/05
Tert-butyl alcohol (TBA)	890	10	µg/L	1.0		5/6/05
Di-isopropyl ether (DIPE)	2.2	1.0	µg/L	1.0		5/6/05
Ethyl tert-butyl ether (ETBE)	12	1.0	µg/L	1.0		5/6/05
Benzene	ND	0.50	µg/L	1.0		5/6/05
Tert-amyl methyl ether (TAME)	ND	200	µg/L	100		5/6/05
1,2-Dichloroethane	1.8	1.0	µg/L	1.0		5/6/05
Toluene	ND	0.50	µg/L	1.0		5/6/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/6/05
Chlorobenzene	ND	1.0	µg/L	1.0		5/6/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/6/05
m,p-Xylene	ND	0.50	µg/L	1.0		5/6/05
o-Xylene	ND	0.50	µg/L	1.0		5/6/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/6/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/6/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/6/05
Surrogate: 1,4-Dichlorobenzene-d4	95.7	80.8-139	% Rec	1.0		5/6/05

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	1,900	50	µg/L	1.0		5/6/05

Client Sample ID: 4563-MW8-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-08D

Matrix: Groundwater

Test Name: TPH as Diesel/Motor Oil w/ Silica Gel Cleanup

Reference: EPA 3510/3630/GCFID(LUFT)/8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	5/11/05	5/13/05
TPHC Motor Oil	ND	170	µg/L	1.0	5/11/05	5/13/05

Date: 17-May-05
WorkOrder: 0505064

ANALYTICAL REPORT

Client Sample ID: 4563-MW9-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-09A

Matrix: Groundwater

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	4.1	1.0	µg/L	1.0		5/5/05
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		5/5/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		5/5/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		5/5/05
Benzene	ND	0.50	µg/L	1.0		5/5/05
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		5/5/05
1,2-Dichloroethane	ND	1.0	µg/L	1.0		5/5/05
Toluene	ND	0.50	µg/L	1.0		5/5/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/5/05
Chlorobenzene	ND	1.0	µg/L	1.0		5/5/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/5/05
m,p-Xylene	ND	0.50	µg/L	1.0		5/5/05
o-Xylene	ND	0.50	µg/L	1.0		5/5/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/5/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/5/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/5/05
Surrogate: 1,4-Dichlorobenzene-d4	92.0	80.8-139	% Rec	1.0		5/5/05

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	ND	50	µg/L	1.0		5/5/05

Client Sample ID: 4563-MW9-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-09D

Matrix: Groundwater

Test Name: TPH as Diesel/Motor Oil

Reference: EPA 3510/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	5/8/05	5/9/05
TPHC Motor Oil	ND	170	µg/L	1.0	5/8/05	5/9/05

Date: 17-May-05
WorkOrder: 0505064

ANALYTICAL REPORT

Client Sample ID: 4563-MW10-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-10A

Matrix: Groundwater

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	9.1	1.0	µg/L	1.0		5/5/05
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		5/5/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		5/5/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		5/5/05
Benzene	ND	0.50	µg/L	1.0		5/5/05
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		5/5/05
1,2-Dichloroethane	ND	1.0	µg/L	1.0		5/5/05
Toluene	ND	0.50	µg/L	1.0		5/5/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/5/05
Chlorobenzene	ND	1.0	µg/L	1.0		5/5/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/5/05
m,p-Xylene	ND	0.50	µg/L	1.0		5/5/05
o-Xylene	ND	0.50	µg/L	1.0		5/5/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/5/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/5/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/5/05
Surrogate: 1,4-Dichlorobenzene-d4	93.0	80.8-139	% Rec	1.0		5/5/05

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	ND	50	µg/L	1.0		5/5/05

Client Sample ID: 4563-MW10-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-10D

Matrix: Groundwater

Test Name: TPH as Diesel/Motor Oil w/ Silica Gel Cleanup

Reference: EPA 3510/3630/GCFID(LUFT)/8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	5/11/05	5/13/05
TPHC Motor Oil	210	170	µg/L	1.0	5/11/05	5/13/05

Date: 17-May-05

WorkOrder: 0505064

ANALYTICAL REPORT

Client Sample ID: 4563-MW11-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-11A

Matrix: Groundwater

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	3.0	1.0	µg/L	1.0		5/5/05
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		5/5/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		5/5/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		5/5/05
Benzene	ND	0.50	µg/L	1.0		5/5/05
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		5/5/05
1,2-Dichloroethane	ND	1.0	µg/L	1.0		5/5/05
Toluene	ND	0.50	µg/L	1.0		5/5/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/5/05
Chlorobenzene	ND	1.0	µg/L	1.0		5/5/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/5/05
m,p-Xylene	ND	0.50	µg/L	1.0		5/5/05
o-Xylene	ND	0.50	µg/L	1.0		5/5/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/5/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/5/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/5/05
Surrogate: 1,4-Dichlorobenzene-d4	93.6	80.8-139	% Rec	1.0		5/5/05

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	ND	50	µg/L	1.0		5/5/05

Client Sample ID: 4563-MW11-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-11D

Matrix: Groundwater

Test Name: TPH as Diesel/Motor Oil w/ Silica Gel Cleanup

Reference: EPA 3510/3630/GCFID(LUFT)/8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	5/11/05	5/13/05
TPHC Motor Oil	ND	170	µg/L	1.0	5/11/05	5/13/05

Date: 17-May-05
WorkOrder: 0505064

ANALYTICAL REPORT

Client Sample ID: 4563-MW12-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-12A

Matrix: Groundwater

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	720	50	µg/L	50		5/6/05
Tert-butyl alcohol (TBA)	ND	15	µg/L	1.0		5/6/05
Di-isopropyl ether (DIPE)	1.6	1.0	µg/L	1.0		5/6/05
Ethyl tert-butyl ether (ETBE)	3.2	1.0	µg/L	1.0		5/6/05
Benzene	ND	0.50	µg/L	1.0		5/6/05
Tert-amyl methyl ether (TAME)	34	1.0	µg/L	1.0		5/6/05
1,2-Dichloroethane	ND	1.0	µg/L	1.0		5/6/05
Toluene	ND	0.50	µg/L	1.0		5/6/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/6/05
Chlorobenzene	ND	1.0	µg/L	1.0		5/6/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/6/05
m,p-Xylene	ND	0.50	µg/L	1.0		5/6/05
o-Xylene	ND	0.50	µg/L	1.0		5/6/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/6/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/6/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/6/05
Surrogate: 1,4-Dichlorobenzene-d4	95.6	80.8-139	% Rec	1.0		5/6/05

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	640	50	µg/L	1.0		5/6/05

Client Sample ID: 4563-MW12-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-12D

Matrix: Groundwater

Test Name: TPH as Diesel/Motor Oil w/ Silica Gel Cleanup

Reference: EPA 3510/3630/GCFID(LUFT)/8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	5/11/05	5/16/05
TPHC Motor Oil	ND	170	µg/L	1.0	5/11/05	5/16/05

Date: 17-May-05
WorkOrder: 0505064

ANALYTICAL REPORT

Client Sample ID: 4563-MW13-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-13A

Matrix: Groundwater

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	63	1.0	µg/L	1.0		5/6/05
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		5/6/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		5/6/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		5/6/05
Benzene	ND	0.50	µg/L	1.0		5/6/05
Tert-amyl methyl ether (TAME)	1.7	1.0	µg/L	1.0		5/6/05
1,2-Dichloroethane	ND	1.0	µg/L	1.0		5/6/05
Toluene	ND	0.50	µg/L	1.0		5/6/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/6/05
Chlorobenzene	ND	1.0	µg/L	1.0		5/6/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/6/05
m,p-Xylene	ND	0.50	µg/L	1.0		5/6/05
o-Xylene	ND	0.50	µg/L	1.0		5/6/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/6/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/6/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/6/05
Surrogate: 1,4-Dichlorobenzene-d4	90.6	80.8-139	% Rec	1.0		5/6/05

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	63	50	µg/L	1.0		5/6/05

Client Sample ID: 4563-MW13-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-13D

Matrix: Groundwater

Test Name: TPH as Diesel/Motor Oil w/ Silica Gel Cleanup

Reference: EPA 3510/3630/GCFID(LUFT)/8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	5/11/05	5/13/05
TPHC Motor Oil	ND	170	µg/L	1.0	5/11/05	5/13/05

Date: 17-May-05
WorkOrder: 0505064

ANALYTICAL REPORT

Client Sample ID: 4563-MW14-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-14A

Matrix: Groundwater

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	7.9	1.0	µg/L	1.0		5/5/05
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		5/5/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		5/5/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		5/5/05
Benzene	1.3	0.50	µg/L	1.0		5/5/05
Tert-amyl methyl ether (TAME)	1.2	1.0	µg/L	1.0		5/5/05
1,2-Dichloroethane	ND	1.0	µg/L	1.0		5/5/05
Toluene	0.55	0.50	µg/L	1.0		5/5/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/5/05
Chlorobenzene	ND	1.0	µg/L	1.0		5/5/05
Ethylbenzene	1.3	0.50	µg/L	1.0		5/5/05
m,p-Xylene	0.59	0.50	µg/L	1.0		5/5/05
o-Xylene	ND	0.50	µg/L	1.0		5/5/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/5/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/5/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/5/05
Surrogate: 1,4-Dichlorobenzene-d4	86.9	80.8-139	% Rec	1.0		5/5/05

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	1,000	50	µg/L	1.0		5/5/05

Client Sample ID: 4563-MW14-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-14D

Matrix: Groundwater

Test Name: TPH as Diesel/Motor Oil w/ Silica Gel Cleanup

Reference: EPA 3510/3630/GCFID(LUFT)/8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	140	50	µg/L	1.0	5/12/05	5/14/05
TPHC Motor Oil	ND	170	µg/L	1.0	5/12/05	5/14/05

Date: 17-May-05
WorkOrder: 0505064

ANALYTICAL REPORT

Client Sample ID: 4563-MW15-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-15A

Matrix: Groundwater

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	ND	70	µg/L	1.0		5/5/05
Tert-butyl alcohol (TBA)	ND	20	µg/L	1.0		5/5/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		5/5/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		5/5/05
Benzene	75	0.50	µg/L	1.0		5/5/05
Tert-amyl methyl ether (TAME)	1.9	1.0	µg/L	1.0		5/5/05
1,2-Dichloroethane	ND	1.0	µg/L	1.0		5/5/05
Toluene	2.4	0.50	µg/L	1.0		5/5/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/5/05
Chlorobenzene	ND	1.0	µg/L	1.0		5/5/05
Ethylbenzene	15	0.50	µg/L	1.0		5/5/05
m,p-Xylene	5.2	0.50	µg/L	1.0		5/5/05
o-Xylene	0.54	0.50	µg/L	1.0		5/5/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/5/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/5/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/5/05
Surrogate: 1,4-Dichlorobenzene-d4	86.7	80.8-139	% Rec	1.0		5/5/05

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	2,200	50	µg/L	1.0		5/5/05

Client Sample ID: 4563-MW15-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-15D

Matrix: Groundwater

Test Name: TPH as Diesel/Motor Oil w/ Silica Gel Cleanup

Reference: EPA 3510/3630/GCFID(LUFT)/8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	170	50	µg/L	1.0	5/12/05	5/14/05
TPHC Motor Oil	ND	170	µg/L	1.0	5/12/05	5/14/05

Date: 17-May-05
WorkOrder: 0505064

ANALYTICAL REPORT

Client Sample ID: 4563-MW16-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-16A

Matrix: Groundwater

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	470	50	µg/L	50		5/6/05
Tert-butyl alcohol (TBA)	300	10	µg/L	1.0		5/6/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		5/6/05
Ethyl tert-butyl ether (ETBE)	4.3	1.0	µg/L	1.0		5/6/05
Benzene	580	25	µg/L	50		5/6/05
Tert-amyl methyl ether (TAME)	14	1.0	µg/L	1.0		5/6/05
1,2-Dichloroethane	ND	1.0	µg/L	1.0		5/6/05
Toluene	15	0.50	µg/L	1.0		5/6/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/6/05
Chlorobenzene	ND	1.0	µg/L	1.0		5/6/05
Ethylbenzene	35	0.50	µg/L	1.0		5/6/05
m,p-Xylene	33	0.50	µg/L	1.0		5/6/05
o-Xylene	7.0	0.50	µg/L	1.0		5/6/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/6/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/6/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/6/05
Surrogate: 1,4-Dichlorobenzene-d4	91.5	80.8-139	% Rec	1.0		5/6/05

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	7,900	2,500	µg/L	50		5/6/05

Client Sample ID: 4563-MW16-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-16D

Matrix: Groundwater

Test Name: TPH as Diesel/Motor Oil w/ Silica Gel Cleanup

Reference: EPA 3510/3630/GCFID(LUFT)/8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	370	50	µg/L	1.0	5/12/05	5/14/05
TPHC Motor Oil	ND	170	µg/L	1.0	5/12/05	5/14/05

Date: 17-May-05
WorkOrder: 0505064

ANALYTICAL REPORT

Client Sample ID: 4563-MW17S-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-17A

Matrix: Groundwater

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	300	50	µg/L	50		5/6/05
Tert-butyl alcohol (TBA)	ND	15	µg/L	1.0		5/6/05
Di-isopropyl ether (DIPE)	1.8	1.0	µg/L	1.0		5/6/05
Ethyl tert-butyl ether (ETBE)	1.7	1.0	µg/L	1.0		5/6/05
Benzene	ND	0.50	µg/L	1.0		5/6/05
Tert-amyl methyl ether (TAME)	2.1	1.0	µg/L	1.0		5/6/05
1,2-Dichloroethane	ND	1.0	µg/L	1.0		5/6/05
Toluene	ND	0.50	µg/L	1.0		5/6/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/6/05
Chlorobenzene	ND	1.0	µg/L	1.0		5/6/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/6/05
m,p-Xylene	ND	0.50	µg/L	1.0		5/6/05
o-Xylene	ND	0.50	µg/L	1.0		5/6/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/6/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/6/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/6/05
Surrogate: 1,4-Dichlorobenzene-d4	96.1	80.8-139	% Rec	1.0		5/6/05

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	320	50	µg/L	1.0		5/6/05

Client Sample ID: 4563-MW17S-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-17D

Matrix: Groundwater

Test Name: TPH as Diesel/Motor Oil

Reference: EPA 3510/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	5/11/05	5/11/05
TPHC Motor Oil	ND	170	µg/L	1.0	5/11/05	5/11/05

Date: 17-May-05
WorkOrder: 0505064

ANALYTICAL REPORT

Client Sample ID: 4563-MW17D-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-18A

Matrix: Groundwater

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	100	50	µg/L	50		5/6/05
Tert-butyl alcohol (TBA)	ND	20	µg/L	1.0		5/6/05
Di-isopropyl ether (DIPE)	2.0	1.0	µg/L	1.0		5/6/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		5/6/05
Benzene	ND	0.50	µg/L	1.0		5/6/05
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		5/6/05
1,2-Dichloroethane	ND	1.0	µg/L	1.0		5/6/05
Toluene	ND	0.50	µg/L	1.0		5/6/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/6/05
Chlorobenzene	ND	1.0	µg/L	1.0		5/6/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/6/05
m,p-Xylene	ND	0.50	µg/L	1.0		5/6/05
o-Xylene	ND	0.50	µg/L	1.0		5/6/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/6/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/6/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/6/05
Surrogate: 1,4-Dichlorobenzene-d4	94.5	80.8-139	% Rec	1.0		5/6/05

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	130	50	µg/L	1.0		5/6/05

Client Sample ID: 4563-MW17D-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-18D

Matrix: Groundwater

Test Name: TPH as Diesel/Motor Oil

Reference: EPA 3510/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	5/11/05	5/11/05
TPHC Motor Oil	ND	170	µg/L	1.0	5/11/05	5/11/05

Date: 17-May-05
WorkOrder: 0505064

ANALYTICAL REPORT

Client Sample ID: 4563-QCTB-W

Received: 5/3/05

Collected: 5/3/05 0:00

Lab ID: 0505064-19A

Matrix: Trip Blank

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	ND	1.0	µg/L	1.0		5/5/05
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		5/5/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		5/5/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		5/5/05
Benzene	ND	0.50	µg/L	1.0		5/5/05
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		5/5/05
1,2-Dichloroethane	ND	1.0	µg/L	1.0		5/5/05
Toluene	ND	0.50	µg/L	1.0		5/5/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/5/05
Chlorobenzene	ND	1.0	µg/L	1.0		5/5/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/5/05
m,p-Xylene	ND	0.50	µg/L	1.0		5/5/05
o-Xylene	ND	0.50	µg/L	1.0		5/5/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/5/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/5/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/5/05
Surrogate: 1,4-Dichlorobenzene-d4	91.7	80.8-139	% Rec	1.0		5/5/05

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	ND	50	µg/L	1.0		5/5/05

CLIENT: LACO Associates
Work Order: 0505064
Project: 4563.01, FORTUNA SHELL

QC SUMMARY REPORT

Method Blank

Sample ID	MB-5/5/05	Batch ID:	R34776	Test Code:	8260OXYW	Units:	µg/L	Analysis Date	5/5/05 6:22:00 AM	Prep Date			
Client ID:		Run ID:	ORGCMS2_050505B	SeqNo:	503817								
Analyte	Result	Limit	SPK value	SPK Ref Val	Units:	µg/L	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	1.0											
Tert-butyl alcohol (TBA)	ND	10											
Di-isopropyl ether (DIPE)	ND	1.0											
Ethyl tert-butyl ether (ETBE)	ND	1.0											
Benzene	ND	0.50											
Tert-amyl methyl ether (TAME)	ND	1.0											
1,2-Dichloroethane	ND	1.0											
Toluene	ND	0.50											
1,2-Dibromoethane (EDB)	ND	1.0											
Chlorobenzene	ND	1.0											
Ethylbenzene	0.1761	0.50											J
m,p-Xylene	0.2561	0.50											J
o-Xylene	0.2161	0.50											J
1,3-Dichlorobenzene	ND	1.0											
1,4-Dichlorobenzene	ND	1.0											
1,2-Dichlorobenzene	ND	1.0											
1,4-Dichlorobenzene-d4	0.954	0.10	1.00	0	95.4%	81	139	0					

Sample ID	MB-5/5/05	Batch ID:	R34773	Test Code:	GASW-MS	Units:	µg/L	Analysis Date	5/5/05 6:22:00 AM	Prep Date			
Client ID:		Run ID:	ORGCMS2_050505A	SeqNo:	503770								
Analyte	Result	Limit	SPK value	SPK Ref Val	Units:	µg/L	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gasoline	18.32	50											J

Qualifiers: ND - Not Detected at the Reporting Limit
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 B - Analyte detected in the associated Method Blank

CLIENT: LACO Associates
 Work Order: 0505064
 Project: 4563.01, FORTUNA SHELL

QC SUMMARY REPORT
 Method Blank

Sample ID **MB-13478** Batch ID: **13478** Test Code: **SGTPDMW** Units: **µg/L** Analysis Date **5/13/05 12:00:14 PM** Prep Date **5/11/05**
 Client ID: Run ID: **ORGC5_050513A** SeqNo: **504935**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	49.29	50									J
TPHC Motor Oil	ND	170									

Sample ID **MB-13490** Batch ID: **13490** Test Code: **SGTPDMW** Units: **µg/L** Analysis Date **5/14/05 2:01:46 PM** Prep Date **5/12/05**
 Client ID: Run ID: **ORGC5_050514A** SeqNo: **504944**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	43.03	50									J
TPHC Motor Oil	ND	170									

Sample ID **MB-13478** Batch ID: **13478** Test Code: **SGTPDMW** Units: **µg/L** Analysis Date **5/16/05 7:03:42 PM** Prep Date **5/11/05**
 Client ID: Run ID: **ORGC5_050516A** SeqNo: **505206**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	ND	50									
TPHC Motor Oil	ND	170									

Sample ID **MB-13462** Batch ID: **13462** Test Code: **TPHDMW** Units: **µg/L** Analysis Date **5/9/05 1:39:59 PM** Prep Date **5/8/05**
 Client ID: Run ID: **ORGC7_050509A** SeqNo: **503986**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	104.9	50									
TPHC Motor Oil	ND	170									

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits

CLIENT: LACO Associates

Work Order: 0505064

Project: 4563.01, FORTUNA SHELL

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID	LCS-05308	Batch ID: R34776	Test Code: 8260OXYW	Units: µg/L	Analysis Date	5/5/05 2:17:00 AM	Prep Date				
Client ID:	Run ID: ORGCMS2_050505B	Limit	SPK value	SPK Ref Val	LowLimit	HighLimit	RPD Ref Val				
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	18.31	1.0	20.0	0	91.5%	80	120	0			
Tert-butyl alcohol (TBA)	354.6	10	400	0	88.6%	25	162	0			
Di-isopropyl ether (DIPE)	18.12	1.0	20.0	0	90.6%	80	120	0			
Ethyl tert-butyl ether (ETBE)	18.11	1.0	20.0	0	90.5%	77	120	0			
Benzene	18.11	0.50	20.0	0	90.5%	78	117	0			
Tert-amyl methyl ether (TAME)	19.69	1.0	20.0	0	98.4%	64	136	0			
1,2-Dichloroethane	17.28	1.0	20.0	0	86.4%	74	121	0			
Toluene	17.61	0.50	20.0	0	88.0%	80	120	0			
1,2-Dibromoethane (EDB)	17.53	1.0	20.0	0	87.6%	80	120	0			
Chlorobenzene	18.30	1.0	20.0	0	91.5%	80	120	0			
Ethylbenzene	18.86	0.50	20.0	0	94.3%	80	120	0			
m,p-Xylene	37.26	0.50	40.0	0	93.1%	80	120	0			
o-Xylene	19.48	0.50	20.0	0	97.4%	80	120	0			
1,3-Dichlorobenzene	17.66	1.0	20.0	0	88.3%	81	125	0			
1,4-Dichlorobenzene	17.32	1.0	20.0	0	86.6%	79	132	0			
1,2-Dichlorobenzene	18.03	1.0	20.0	0	90.2%	81	134	0			
1,4-Dichlorobenzene-d4	1.06	0.10	1.00	0	105%	81	139	0			

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: LACO Associates
 Work Order: 0505064
 Project: 4563.01, FORTUNA SHELL

QC SUMMARY REPORT

Laboratory Control Spike Duplicate

Sample ID	LCSD-05308	Batch ID:	R34776	Test Code:	8260OXYW	Units:	µg/L	Analysis Date	5/5/05 2:48:00 AM	Prep Date	
Client ID:		Run ID:	ORGCMS2_050505B	SeqNo:	503815						
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	18.45	1.0	20.0	0	92.2%	80	120	18.3	0.756%	20	
Tert-butyl alcohol (TBA)	348.7	10	400	0	87.2%	25	162	355	1.67%	20	
Di-isopropyl ether (DIPE)	18.33	1.0	20.0	0	91.7%	80	120	18.1	1.18%	20	
Ethyl tert-butyl ether (ETBE)	18.16	1.0	20.0	0	90.8%	77	120	18.1	0.275%	20	
Benzene	18.18	0.50	20.0	0	90.9%	78	117	18.1	0.396%	20	
Tert-amyl methyl ether (TAME)	19.97	1.0	20.0	0	99.8%	64	136	19.7	1.41%	20	
1,2-Dichloroethane	17.37	1.0	20.0	0	86.8%	74	121	17.3	0.519%	20	
Toluene	17.74	0.50	20.0	0	88.7%	80	120	17.6	0.744%	20	
1,2-Dibromoethane (EDB)	17.94	1.0	20.0	0	89.7%	80	120	17.5	2.35%	20	
Chlorobenzene	18.23	1.0	20.0	0	91.1%	80	120	18.3	0.415%	20	
Ethylbenzene	19.00	0.50	20.0	0	95.0%	80	120	18.9	0.715%	20	
m,p-Xylene	38.09	0.50	40.0	0	95.2%	80	120	37.3	2.23%	20	
o-Xylene	19.41	0.50	20.0	0	97.0%	80	120	19.5	0.395%	20	
1,3-Dichlorobenzene	17.88	1.0	20.0	0	89.4%	81	125	17.7	1.19%	20	
1,4-Dichlorobenzene	17.54	1.0	20.0	0	87.7%	79	132	17.3	1.31%	20	
1,2-Dichlorobenzene	18.07	1.0	20.0	0	90.3%	81	134	18.0	0.185%	20	
1,4-Dichlorobenzene-d4	1.06	0.10	1.00	0	106%	81	139	1.06	0.401%	20	

Sample ID	LCSD-05309	Batch ID:	R34773	Test Code:	GASW-MS	Units:	µg/L	Analysis Date	5/5/05 4:20:00 AM	Prep Date	
Client ID:		Run ID:	ORGCMS2_050505A	SeqNo:	503767						
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gasoline	1,115	50	1,000	0	111%	80	120	0			

Sample ID	LCSD-05309	Batch ID:	R34773	Test Code:	GASW-MS	Units:	µg/L	Analysis Date	5/5/05 4:51:00 AM	Prep Date	
Client ID:		Run ID:	ORGCMS2_050505A	SeqNo:	503768						
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gasoline	1,075	50	1,000	0	108%	80	120	1,120	3.62%	20	

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits

QC SUMMARY REPORT
Laboratory Control Spike

CLIENT: LACO Associates
Work Order: 0505064
Project: 4563-01, FORTUNA SHELL

Sample ID **LCS-13478** Batch ID: **13478** Test Code: **SGTPDMW** Units: **µg/L** Analysis Date **5/13/05 9:52:27 AM** Prep Date **5/11/05**
Client ID: Run ID: **ORGC5_050513A** SeqNo: **504933**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	476.1	50	500	0	95.2%	42	96	0			
TPHC Motor Oil	964.5	170	1,000	0	96.5%	52	103	0			

Sample ID **LCSD-13478** Batch ID: **13478** Test Code: **SGTPDMW** Units: **µg/L** Analysis Date **5/13/05 10:23:45 AM** Prep Date **5/11/05**
Client ID: Run ID: **ORGC5_050513A** SeqNo: **504934**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	461.4	50	500	0	92.3%	42	96	476	3.15%	15	
TPHC Motor Oil	1,008	170	1,000	0	101%	52	103	964	4.39%	15	

Sample ID **LCS-13490** Batch ID: **13490** Test Code: **SGTPDMW** Units: **µg/L** Analysis Date **5/14/05 11:52:38 AM** Prep Date **5/12/05**
Client ID: Run ID: **ORGC5_050514A** SeqNo: **504942**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	371.4	50	500	0	74.3%	42	96	0			
TPHC Motor Oil	869.6	170	1,000	0	87.0%	52	103	0			

Sample ID **LCSD-13490** Batch ID: **13490** Test Code: **SGTPDMW** Units: **µg/L** Analysis Date **5/14/05 12:25:48 PM** Prep Date **5/12/05**
Client ID: Run ID: **ORGC5_050514A** SeqNo: **504943**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	394.1	50	500	0	78.8%	42	96	371	5.94%	15	
TPHC Motor Oil	882.2	170	1,000	0	88.2%	52	103	870	1.43%	15	

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits

CLIENT: LACO Associates
 Work Order: 0505064
 Project: 4563.01, FORTUNA SHELL

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID **LCS-13478** Batch ID: **13478** Test Code: **SGTPDMW** Units: **µg/L** Analysis Date **5/16/05 4:44:43 PM** Prep Date **5/11/05**
 Client ID: **ORGC5_050516A** Run ID: **ORGC5_050516A** SeqNo: **505204**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	335.3	50	500	0	67.1%	42	96	0			
TPHC Motor Oil	759.5	170	1,000	0	75.9%	52	103	0			

Sample ID **LCSD-13478** Batch ID: **13478** Test Code: **SGTPDMW** Units: **µg/L** Analysis Date **5/16/05 5:18:41 PM** Prep Date **5/11/05**
 Client ID: **ORGC5_050516A** Run ID: **ORGC5_050516A** SeqNo: **505205**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	372.6	50	500	0	74.5%	42	96	335	10.5%	15	
TPHC Motor Oil	837.2	170	1,000	0	83.7%	52	103	760	9.74%	15	

Sample ID **LCS-13462** Batch ID: **13462** Test Code: **TPHDMW** Units: **µg/L** Analysis Date **5/9/05 11:47:47 AM** Prep Date **5/8/05**
 Client ID: **ORGC7_050509A** Run ID: **ORGC7_050509A** SeqNo: **503984**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	537.8	50	500	0	108%	72	124	0			B
TPHC Motor Oil	1,117	170	1,000	0	112%	71	139	0			

Sample ID **LCSD-13462** Batch ID: **13462** Test Code: **TPHDMW** Units: **µg/L** Analysis Date **5/9/05 12:06:34 PM** Prep Date **5/8/05**
 Client ID: **ORGC7_050509A** Run ID: **ORGC7_050509A** SeqNo: **503985**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	538.8	50	500	0	108%	72	124	538	0.190%	15	B
TPHC Motor Oil	1,101	170	1,000	0	110%	71	139	1,120	1.42%	15	

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: LACO Associates

Work Order: 0505064

Project: 4563.01, FORTUNA SHELL

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID **LCS-13477** Batch ID: **13477** Test Code: **TPHDMW** Units: **µg/L** Analysis Date **5/11/05 10:41:15 AM** Prep Date **5/11/05**
 Client ID: Run ID: **ORG07_050511A** SeqNo: **504371**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	553.5	50	500	0	111%	72	124	0			
TPHC Motor Oil	971.5	170	1,000	0	97.2%	71	139	0			

Sample ID **LCSD-13477** Batch ID: **13477** Test Code: **TPHDMW** Units: **µg/L** Analysis Date **5/11/05 10:59:37 AM** Prep Date **5/11/05**
 Client ID: Run ID: **ORG07_050511A** SeqNo: **504372**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	550.1	50	500	0	110%	72	124	554	0.617%	15	
TPHC Motor Oil	1,036	170	1,000	0	104%	71	139	972	6.43%	15	

Qualifiers:

ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

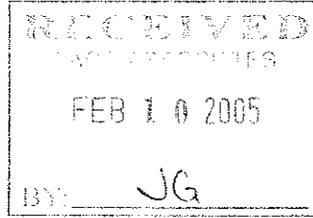
S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank



Humboldt County Department of Health and Human Services
DIVISION OF ENVIRONMENTAL HEALTH

100 H Street - Suite 100 - Eureka, CA 95501
Voice: 707-445-6215 - Fax: 707-441-5699 - Toll Free: 800-963-9241
envhealth@co.humboldt.ca.us



February 7, 2005

Humboldt Petroleum, Incorporated
James Seiler
PO Box 131
Eureka, California 95502-0131

Subject: HPI Fortuna Shell, 819 Main Street, Fortuna, California
LOP #12672

LMO
DRG
DNL
GH
GEO
HPI
FRB
TJW
LDB
File
Project # 4563.01

Dear Mr. Seiler:

Thank you for submitting Results of Pilot Test - Oxygen Sparging System, prepared by LACO Associates.

- We concur with the recommendation to prepare a workplan for the installation of a comprehensive oxygen sparging system.
Provide a revised summary of site conditions with the next report. Please incorporate data from the adjacent site.

Please contact me at (707) 268-2208 if you have any questions.

Sincerely,

[Handwritten signature of Mark Verhey]

Mark Verhey, Geologist
Humboldt County Local Oversight Program

MAV: swb

cc: Christopher Watt, LACO Associates
Thomas Bauhs, Chevron U.S.A. Products Company
Peter Van Alyea, Redwood Oil Company

12672.024 / 427L